



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>





Per. 1535 e. $\frac{189}{11}$





THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

EDITED BY
FORBES WINSLOW, M.D., D.C.L. OXON.

VOL. XI.



LONDON:
JOHN CHURCHILL, NEW BURLINGTON STREET.
MDCCCLVIII.



Per. 1535 e. $\frac{189}{11}$



CONTENTS.

ART.	PAGE
I. On Civilization	175
II. The Legal Doctrine of Responsibility in Cases of Insanity, connected with alleged Criminal Acts	214
III. On Insanity and Lunatic Asylums in Norway	246
IV. Charlotte Brontë—A Psychological Study	295
V. Physiological Psychology—No. V.	317
VI. Mind and Body	335
VII. On Dipsomania, or Drunken Insanity	349

CONTENTS.

ART.	PAGE
I. On Civilization	175
II. The Legal Doctrine of Responsibility in Cases of Insanity, connected with alleged Criminal Acts	214
III. On Insanity and Lunatic Asylums in Norway	246
IV. Charlotte Brontë—A Psychological Study	295
V. Physiological Psychology—No. V.	317
VI. Mind and Body	335
VII. On Dipsomania, or Drunken Insanity	349

CONTENTS.

ART.	PAGE
Dr. E. Brown-Séquard on the Physiology and Pathology of the Nervous System	i
I. On the Causes of Idiocy	365
II. On Suicide	396
III. Tendency of Misdirected Education and the Unbalanced Mind to produce Insanity	424
IV. On the Paralysis of the Insane	444
V. An Autobiographical Sketch of a Drunkard	461
VI. A Singular Case of Insanity	490
VII. Psychology of Kant	494

CONTENTS.

ST.	PAGE
Psychological Quarterly Retrospect	xvii.—xl.
I. Lunacy Legislation	523
II. On the Moral Pathology of London	536
III. On the Psychological Basis of the Language of Orators, Poets, and Philosophers	567
IV. On a particular Class of Dreams induced by Food	575
V. The Asylums of Italy, Germany, and France, &c.	597
I. The Present State of Lunacy in England and Wales	626
Reviews	631
Foreign Psychological Literature	640
Medico-Legal Trial—Plea, "Lunacy."—Case of the Rev. W. J. J. Leach	668

THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

JANUARY 1, 1858.

ART. I.—BODY *v.* MIND.

IT is a curious and interesting study to trace the variety of opinions which have been held concerning the respective existence and the mutual relations of the Body and the Intellectual Principle—opinions which have, in turn, taken up every position between the absolute non-existence of Mind, save as a form or function of Matter, on the one hand ; and, on the other, the merely phenomenal existence of Matter dependent upon the variations of a sentient or thinking immaterial existence, the Mind. It was only at a comparatively late period in the world's history that Mind obtained from philosophy its formal recognition as a distinct entity ; as something superadded to, and distinct from, Matter ; closely united, yet not allied ; dependent for its manifestation, but independent in essence. In these latter days, when Mind and Matter are the watchwords equally of domestic discussion, of rival though friendly schools of philosophy, and of fierce sectarian controversy, it is difficult for us to realize to ourselves the state of the schools in which the laws of human nature were taught as a great whole. Yet so it was ; it was with man as with the universe at large—he must be one and undivided. As the first attempts at the formation of systems of cosmogony were too vast in their designs to do less than account on one theory for the whole cosmical phenomena, the formation of the universe was ascribed to *one* principle, as heat, atoms, attraction and repulsion, fire, harmony, numbers, &c., no note being taken of the ever progressive workings of the individual forces continually in operation throughout nature, or the mechanical results of the conditional existence of matter.

Such being the case in the macrocosm, we need feel little surprise that the microcosm, man's *superficially* homogeneous nature, should remain long unanalysed ; still less, when we consider

what an utterly inexplicable phenomenon is involved in its analysis into a material mass, and an immaterial active principle; no less than that something invisible, impalpable, undetectable by any accessible means of investigation, must take possession of a mass of inert matter, and do with it whatever may seem good unto it. Rather may we wonder at the boldness and originality of conception which led Anaxagoras, in the fifth century before the Christian era, to proclaim, in the face of all the incomprehensible theories of the earth and man, that a Supreme Intelligence, or Mind, was the cause of all those phenomena hitherto attributed to Fate, Chance, or some other shadow of a name; and that man was a compound being, consisting of a body and a spirit. It is true that the bubbling, seething, restless, explosive mind must have made itself felt to many, in constantly asserting its supremacy over matter; the difficulty of accounting for these things seems to have been obviated by considering the soul as consisting of finer atoms than the body; and no distinct enunciation of a separate principle was attained to. All honour, then, to Anaxagoras, worthily surnamed by his contemporaries, *νοῦς*, or Intelligence. Wild and impossible as were his notions of natural causation; eclipsed as was his glory by that of his great pupil and successor, Socrates; yet to him belongs the almost matchless merit of announcing, amidst a heathen world, and without the light of any external revelation, the primitive conception of a One Omnipotent Creative Cause.*

From this time forward, the *ψυχή*,† or *anima*, which had

* Socrates appears to have been dissatisfied with Anaxagoras, because he could not fully apply his own conception to the practical explanation of nature's mysteries. In the *Phædo*, speaking to Cæbes, he says—"Having once heard a person reading from a book written by Anaxagoras, which said that it is Intelligence that sets in order and is the cause of all things, I was delighted with this cause, and it appeared to me to be in a manner well that Intelligence should be the cause of all things." He then proceeds to state how he expected that the author would be able to explain all phenomena according to this intelligence, by considering how it would be best for such and such things to exist, seeing that so they must be best if thus ordered; also, "That he would instruct me whether the earth is round or flat, and would explain the cause and necessity of its being so," &c. "I was in like manner prepared to ask respecting the sun and moon and stars, with respect to their velocities, &c.; in what way it is better for them both to act and be affected as they are." . . . "From this wonderful hope I was speedily thrown down, when, as I advanced and read over his works, I meet with a man who makes no use of intelligence, nor assigns any cause for the ordering of all things, but makes the causes to consist of air, ether, and water, and many other things equally absurd." In this manner Anaxagoras appears to have been in advance of Socrates, though he could not fully wield his own idea.

† A contemporary writer makes the following remarks illustrative of this subject:—"We do a certain Greek word the honour to translate it *soul*; but it is in fact equally applicable to the vegetative life of a cabbage, to the animal life of a sheep, and to the spiritual life of an apostle. An ordinary Greek thought his body just as much of the essence of his humanity as his spirit, and bodily just as important as spiritual perfection. If St. Paul's thorn in

hitherto appeared to be almost equally applicable to man and the brutes, and even to vegetables, had a more specific significance; and man's compound nature became almost imperceptibly a recognised dogma of philosophy.

It is often the case, in the earliest endeavours after truth, that the practical advantages are by no means commensurate with the actual progress made in knowledge. Under the early errors as to man's nature, the body was carefully trained along with the mind; both were treated as fellow-workers in one cause. The Academe, the Lyceum, and the Cynosarges were schools for the body as well as the mind—there the wrestler, the discobolus, and the philosopher met for common purposes.

Under the advanced views, the body became gradually neglected and despised, though this result was naturally of tardy growth. Slowly, however and certainly, the supremacy of mind was acknowledged; a powerful impulse was also given in the same direction by the diffusion of Christianity, and especially by the gorgeous visions of a glorious immortality which were opened to the astonished minds of men awaking from a long Pagan night. Body and mind were thenceforth held, by philosopher and Christian, to have separate and antagonistic interests. To the former, the body was a clog, an impediment to the acquisition of knowledge—a something perpetually interfering, by its pains, its sorrows, and its imperfections, with the clear views of truth which he supposed the unencumbered soul would obtain—constantly distracting the attention by its material relations and requirements—ever of the earth, earthy—tending to its own source, binding and dragging the soul along with it.* To the latter, the Christian, the body was sin incarnate, the source of all evil and temptation, the barrier between the soul and heaven.

Epictetus may well illustrate the views of the philosopher. When severely treated by his master, Epaphroditus, under the most intense agony he smiled, and told him that he would break his leg with twisting it. This actually did occur, but without disturbing his equanimity. On being questioned as to the cause of

the flesh was a visible deformity, a Greek educator would have thought it better for him to be put to death as soon as he was born, than to live a burden and a disgrace to his community and to himself. Plato himself would have regarded it as an abuse of the art of medicine to cherish the flickering flame of life in a Pascal or a William III. Epictetus summed up all that was most startling and paradoxical to a Pagan ear when he said, in his own lines on himself—'I was a slave, a cripple, a beggar—and a favourite of the gods.'—*Saturday Review*, Nov. 7, 1857.

* Noxia corpora tardant,
Terrenique hebetant artus, moribundaque membra.
Hinc metuunt, cupiuntque, dolent, gaudentque, nec auras
Suspiciunt, clausæ tenebris et carcere cæcæ.

this astonishing composure, he merely replied that the body was "*external*."*

In the early centuries of the Christian era, the body seemed to be ever of less and less estimation. There is something even amusing in the excess of contempt in which it was held, and the abuse heaped upon it. A prison-house, a cage, a weary load of mortality—these were, by comparison, complimentary terms. Gregory Nyssen calls it *ὀσμῆς ἐργαστήριον* "a fuliginous ill-savoured shop, a prison, an ill-savoured sink," as the words are translated by an old divine. It is "a lump of flesh which mouldereth away and draweth near to corruption whilst we speak of it." St. Augustine defines the two natures thus, "Domine, duo creasti; alterum prope te, alterum prope nihil." At the best, the body was considered a workshop for the soul, *ἐκ τοῦ σώματος τῇ ψυχῇ φιλοπονησαί*. The torments of the body were so utterly despised, as scarcely to be considered personal matters:—

Tormenta, carcer, ungulae,
Stridensque flammis lamina,
Atque ipsa poenarum ultima,
Mors.

In fine, the body was considered the source of all evil, and, as such, worthy of no consideration. The Platonists, as St. Augustine says, "hold that these our mortal members do produce the effects of fear, desire, joy, and sorrow, in our bodies; from which four perturbations (as Tully calls them) or passions, the whole inundation of man's enormities have their source and spring."†

The Manicheans put the climax to these reproaches cast upon the body. They maintained that the body was so evil that its creation cannot be ascribed to the same author as that of the soul. Farindon says, "The Manichee, observing that war which is betwixt it (the body) and the soul, alloweth it no better maker than the devil;" and Ludovicus Vives, to the same effect, says, "They held all flesh the work of the devil, not of God, and therefore they forbade their hearers to kill any creatures, lest they should offend the Prince of Darkness, whence they said all flesh had originated." In their opinion, the great object of the government of the god of light was to deliver the captive souls of men from their corporeal prisons. But one thing remained to be done after this, and that was reserved for the philosophers of our own era—viz, to deny the body any existence whatever, save as a

* The small estimation in which the body was often held is not obscurely intimated by the question and address of Æneas to his father, who had spoken of souls returning to their bodies:—

O pater, anne aliquas ad cœlum hinc ire putandum est
Sublimes animas, iterumque ad tarda reverti
Corpora! quæ lucis miseris tam dira cupido!

† Translation by Ludovicus Vives.

phase, quality, or affection of the mind. This annihilation, however, it only shared in common with matter in general; in short, with all external nature.

Thus was an antagonism, a division of interests, instituted between the material and the immaterial elements of man's nature—one which, in various forms, in accordance with the spirit of the times, has been propagated even until the present: now one and now the other being held in paramount esteem, in accordance with the demands necessary to be made upon their functions. Here, brain has been had in honour; there, *thews and sinews*. But the present is essentially an iron and a practical age; both strong limbs and thoughtful minds are in requisition; and the spirit of the age is in nothing more manifest than in the multifarious attempts, by the spread of rational education, and the increased attention to the sanitary condition of the masses, to balance the interests of these two hitherto conflicting elements. But according to the infinite varieties of mind, and the different aspects in which these attempts are viewed, there must ever be differences of opinion as to the extent and nature of the remedies applied to existing evils. Notes of alarm are sounded, and responded to; parties are formed; watchwords are in every mouth; discussions, perhaps somewhat acrimonious, take place; finally, out of evil comes good, for the sense of the community is ascertained, and the evil is modified, if not eradicated.

Such is the case at present. Mr. Gladstone, at the conclusion of an address to the members of the Liverpool Collegiate Institution, made some allusion to the antagonism of which we have been speaking:—

"There still remains," he says, "in some quarters a vulgar notion that there is a natural antagonism between corporeal and mental excellence. I trust that corporal education will never be forgotten; that the pursuit of manly sports will always receive the countenance and encouragement, not only of the boys who engage in them, but of the masters who are responsible for the welfare of those boys."

Mr. Gladstone, denying the reality of the antagonism, illustrates his position by the case of General Havelock, who, when at the Charter-house, was one of the quietest of the quiet, "who used to stand looking on whilst others played, and whose general meditative manner procured for him the name of 'Philosopher,' subsequently diminished to 'Old Phlos'"—yet who is now "distinguishing himself by a temper, a courage, an activity, a zeal, a consistency, and a dogged and dauntless resolution, equal at least to that of any man that England has produced this century."

This casual allusion of Mr. Gladstone's gave rise to a power-

fully-written but somewhat alarming essay upon the dangers of mental pressure, from our leading journal, which has caused much discussion *pro* and *con*. As this essay embraces the entire case for the prosecution—that is, the whole of the allegations brought by Body against Mind—we shall quote it in great part, as a preliminary to an examination of the question in some detail as to the effect of mental labour upon bodily health, in relation to age, temperament, and other circumstances of perhaps equal importance with either of these :—

“ It was a great point in ancient philosophy, the value it attached to the body and the proper training of it, the preservation of its health, strength, and all its proper powers. Ancient philosophy did not despise the body, did not regard it as a mere husk or outside of human nature, or treat it as a despicable and absolutely vile thing; it regarded the body as a true part of human nature, deserving of proper deference, for the failure of which it was sure to retaliate fearfully upon the whole man. Hence the gymnastics of the Greeks, which were not only fostered by the boxers and wrestlers, the drill-sergeants and corporals of that day, but went on under the solemn sanction of sages. There is a distinction between the tone of ancient and modern thought on this subject, and the ancient has certainly an advantage over the modern on this particular point—at least, over the modern before the latest improvements. It has been too much the fashion with us to decry the body, to talk it down, to speak scornfully of it in every possible way, to be always comparing it with the mind for the sole purpose of showing how vile and worthless it is in comparison—a mode of speaking which, even if it is true abstractedly, may be indulged in such a degree as to involve a practical untruth. Our didactic books have been full of the praises of midnight oil, all our oracles of learning have been vehement in favour of unsparing study, and the mind has been subjected to the most acute stimulants, while the body has been left to take care of itself as it can. Of course, the great mass of our school and university youth takes the law into its own hands under these circumstances, and adopts very effective measures against being goaded to suicidal study, but a certain proportion have responded to the whip, and responded but too eagerly.

“ These have been the tactics, we say, of our modern masters of the schools and encouragers of learning—an unsparing use of the goad, a merciless appeal to student ambition and emulation, as if it was impossible to stir up these motives too deeply. But how onesided is a discipline which applies this powerful, sharp, and penetrating stimulus to the mind, while it leaves the body to itself, or rather, what is worse, suppresses and flings aside the claims of the body, which has to fare as it can under the exclusive and oppressive dominion of its rival! How partial is such a system, and superficial because partial! After all our sublime abuse of the body, a body man has, and that body is part of himself, and if he is not fair to it, he himself will be the sufferer. The whole man, we say, will be the sufferer—not the corporeal man

only, but the intellectual man as well. Particular capacities may receive even a monstrous development by the use of an exclusive stimulus, but the reason and judgment of the man as a whole must be injured if one integral part of him is diseased. If the body is thoroughly out of condition, the mind will suffer; it may show a morbid enlargement of one or other faculty of it, but the directing principle—that which alone can apply any faculty or knowledge to a good purpose, can regulate its use and check its extravagances—is weakened and reduced. How miserable is the spectacle of morbid learning, with its buried hoards, and its voracious, insatiable appetite for acquisition, united with the judgment of a child! Such study does, in short, leave men children with remarkable memories and acquisitive powers, who know as much history, philosophy, and poetry as would make a learned man, but who are not a bit the nearer being men in consequence, because they simply know by rote what they know,—they do not understand their own knowledge. This is to a considerable extent the case with all morbid learning, where the general intelligence has not been cultivated,—which general intelligence depends on the soundness and health of the whole man, body and mind too. The picture of a Kirke White dying at the age of 21 of nocturnal study, wet towels round heated temples, want of sleep, want of exercise, want of air, want of everything which Nature intended for the body, is not only melancholy because it is connected with an early death; it is melancholy also on account of the certain effect which would have followed such a course unchecked if he had lived. We see, when we look down the vista of such a life, an enfeebled and a prostrated man, very fit to be made a lion of, like a clever child, and to be patted on the head by patrons and patronesses of genius, but without the proper intellect and judgment of a man. How sad even is the spectacle of that giant of German learning, Neander, lying his whole length on the floor among his books, absorbing recondite matter till the stupor of repletion comes over him, forgetful of time and place, not knowing where he is, on the earth or in the moon, led like a child by his sister to his lecture-room when the lecture hour came, and led away home again when it is over! Is this humanity, we ask, as Providence designed us to be? Is it legitimate, rational human nature? It can hardly be called so.

“We must not let the mind feed itself by the ruin of the body. The mind has no right to this indulgence, this dissipation, and whole-length abandonment to its cravings, any more than the body has to sensual indulgence. This mental dram, the noxious stimulant which produces this overgrowth of mind, is as contrary to nature as the coarser stimulant which unduly excites the body. The mind should be a good, strong, healthy feeder, but not a glutton. We have no right to despise the body, or to speak of it only and exclusively as something which is vile in comparison with the mind. This language will lead astray. It will make ardent, ambitious student youth neglect health, and abandon themselves to the process of acquisition at the cost of body, and ultimately of mind too. Do not use too unsparingly the motive of ambition in dealing with youth. It is a motive which is perfectly honest and natural within proper limits, but when pushed to excess it produces

a feeble, sickly, unmanly growth of character; it creates that whole brood of fantastic theorists, sentimentalists, and speculators which, in art, science, and theology alike, are the seducers and the corruptors of mankind."—*Times*, Oct. 28th, 1857.

The case, though certainly the extreme case, of the injury that *extreme and misdirected* application of the mind may do to the body, is here fairly stated; the illustrations, however, are not fortunate. Kirke White, from his earliest infancy, was of so delicate a constitution as to be unfit (as was supposed) for any active occupation. The question may naturally arise—Would so active and irritable a mind, united to so feeble a frame, have lacked opportunity under any circumstances of rapidly wearing out both itself and its earthly tenement? The wasting fever of such a mind is not to be allayed by any restrictions as to hours of study, rest, or general hygiene. Neander was simply a recluse—a solitary student; nothing worse seems proved or alleged. That he was so absorbed in his favourite pursuits as to be not very conversant with ordinary every-day matters, and even to be a child in many respects, in no respect distinguishes him from thousands of other men whose whole existence is bound up in concerns of much less moment. He lived to a ripe old age, in the enjoyment of moderate health, and all his intellectual faculties, we believe, to the very close of his life.

Setting aside the illustrations, there are some most important allegations, either distinctly expressed or implied, concerning the prominence now given to intellectual pursuits, to the neglect and injury of the bodily health. They amount to this:—

(1.) That mental labour, when approaching to extreme, has an unfavourable influence upon both the health and the character, ruining the former, and rendering the latter "feeble, sickly, and unmanly;" and that this is especially the case with young persons.

(2.) That in our educational systems generally, the body is neglected, and, at its expense, the mind urged beyond its normal powers.

(3.) That in our universities, in particular, the standard of requirements for the obtaining of an honourable or high position is too high.

With the third proposition we are disposed to agree under certain restrictions and limitations; as no doubt many young men, originally of feeble and degenerate constitution, ignorant of any physiological laws, and careless of all hygiene, do break down both in body and mind under the somewhat severe requirements of the curriculum, and a mistaken idea of the true method of mental application with a view to economy. To this subject we shall return shortly.

A writer in the *Saturday Review* has alluded to the second proposition in terms with which we cannot but agree :—

“We are glad that so distinguished an educator as Dr. Kennedy has said a word to allay any undue apprehension that may have been excited as to the neglect of physical development at schools. One would suppose people had never seen the playing-fields of Eton, Harrow, Winchester, or Rugby alive with cricket or football, or the Thames at Windsor on a summer's evening. Those who think that boys at an English public school do not feel respect for distinction in games as well as distinction in Greek and Latin, or that the masters of English public schools do not encourage this feeling, must be ignorant of English schoolboy life. Go to a cricket match at any of the public schools, and look round the ground. You will soon see whether the masters stand aloof from the amusements of the boys—whether to them the physical excellence of their pupils is a matter of indifference or aversion—and whether they grudge every moment which is given to the invigoration of the body and taken from the overstraining of the mind. Some boys there are—as there are some men—who, in spite of all encouragement, and even goading, will not take much part in the sports of their fellows. Sometimes this arises from extreme physical weakness, which may be outgrown in time, but which cannot be cured by force. Sometimes it arises from temperament. Generally it is an unhappy temperament, but occasionally—as in the instance cited by Mr. Gladstone and now before our eyes—it is that temperament of deep thoughtfulness which seems the one indispensable condition of all kinds of greatness. Saving these exceptions—which no system will reduce to uniformity, any more than it will make the colour of all boys' hair the same—we should say the education of English boys at good schools always includes a fair amount of bodily exercise, and that the masters desire and take care that it should do so. Indeed, if we had to name that which in modern times most corresponds to the ancient Greek system of bodily and mental training, we should name the classics and cricket of an English public school.”

The first proposition, however, contains the entire pith of the question which is the immediate object of our investigation ; and we propose to inquire what are, from physiological considerations, the probable effects of mental labour upon the bodily health ; what are the actually observed effects ; upon what ages, temperaments, &c., these effects are most marked ; what circumstances are calculated to influence for good or for evil the reciprocal actions of mind and body ; and, finally, whether the earnest, or even severe, exercise of the mind may not, both directly and indirectly, be attended by results of a conservative nature, entirely opposed to the views above quoted.

It is scarcely necessary to allude even slightly to the proofs*

* These proofs are in brief derived from the facts, that the brain proper is the one organ which increases from the fish to man in proportion to the intelligence ;

that the brain is the material organ (and the only one) through which the mind acts, and communicates with the external world—this is generally acknowledged. It is less understood that the brain, as an organ, is subject to precisely the same laws, chemical, dynamic, and automatic, as other organs and tissues, though physiology teaches this fact as strongly as any other. Thus it is readily granted that the action of a muscle tends to the increase of the circulation in its tissue, and, if long continued, to the hypertrophy or increase of its substance. The same phenomenon takes place in the passive tissues, as the skin, bones, tendons, and ligaments; whenever often-repeated pressure or tension is exercised upon these, their substance is developed in proportion to the requirements of the case.

It is also not disputed that every action of the body is attended by the phenomena of nutrition, including the decomposition of some of the old tissue, and the supply of its place by new particles; and that the evidences of such decomposition in the blood and the excretions are in exact ratio to the energy and continuity of such actions. But although the laws of nutrition are in as active operation in the brain as in any part of the system, we find it at first difficult to realize the fact so well established by irrefragable physiological evidence, that these acts of nutrition are in their essence the necessary conditions of every act of intelligence, perception, or volition; that, "like all other tissues actively concerned in the vital operations, nervous matter is subject to a *waste or disintegration*, which bears an exact proportion to the activity of its operations; or, in other words, that every act of the nervous system involves the death and decay of a certain amount of nervous matter, the replacement of which will be requisite in order to maintain the system in a state fit for action;"* in short, that every idea, every emotion, every act of volition, and every perception, however passive or fleeting, is necessarily attended by a waste and decay of a certain portion of the brain tissue. The author just quoted continues thus:—"In the healthy state of the body, when the exertion of the nervous system by day does not exceed that which the repose of the night may compensate, it is maintained in a condition which fits it for moderate constant exercise; but unusual demands upon its powers—whether by the

that any part of the nervous system except the brain, or any other organ of the body, may be seriously injured, if not destroyed, and this without any lesion of intelligence; but that all injury to the cerebrum is followed by some lesion of intelligence, perception, or volition. Though the brain alone is capable of manifesting the operations of mind, yet it is not by any means universally held that the "*mental principle*" resides solely in the brain. "It is possible," says Müller, "for the mind to act and receive impressions by means of one organ of determinate structure, and yet be present generally throughout the body."—Vol. ii. p. 817.

* Carpenter.

long-continued and severe exercise of the intellect, by excitement of the emotions, or by the combination of both in that state of *anxiety* which the circumstances of man's condition too frequently induce—produce an unusual waste, which requires for the restoration of its powers a prolonged repose."

It is certainly inexplicable how matter and mind can act and react one upon the other; the mystery is acknowledged by all to be insolvable, and will probably ever remain so; the co-ordinate phenomena, however, are open to investigation, and it is clearly ascertained that to certain mental conditions a certain state of the material organ is attached; and for certain mental acts, certain chemical changes in this organ are requisite.

We have stated above, that the brain is subject not only to the same chemical laws of change as the other organs, but to the same automatic influences. In the same manner that certain muscular actions, at first painful, difficult, and complex, become perfectly easy, and are performed almost (if not altogether) without attention after long practice and frequent repetition: so processes of thought, which originally induce painful sensations, and confusion in the mind or brain,* become, by repetition, familiar and simple, and are attended by no pain at the time, nor any inconvenience subsequently. And thus the most complex operations of the mind, calculations involving the most intricate processes, and analyses of the utmost difficulty, are at last performed with an ease, and almost unconsciousness, rivalling the extempore performances of the most finished *artiste* on a musical instrument. It is of importance, in passing, to mark this. We pass on now to notice briefly the various modes in which mind and body affect one another, in order to illustrate the dynamism of the former, and its subjection in many respects to material laws.

A due supply of arterial blood is requisite for the proper action of the mind. Loss of consciousness follows the abstraction of this

* *Mind or Brain.*—In a *physiological* point of view, these terms may be used synonymously. The brain is material; the mind is, we conceive, immaterial; yet as we know and can know nothing abstractedly of mind, apart from its manifestations through its material organ, it is convenient occasionally to use these as convertible terms, especially when concerned with laws of action which appear to be connected with, if not dependent upon, material changes. Yet nothing can be more certain than this, that however dependent mind may be for its manifestations upon a material organ, it is essentially different in nature. Were there no presumptive evidence of this from the phenomena of memory, imagination, &c., it would be supplied abundantly by the frequent instances of the persistent integrity of the mind amid the utter decay of the bodily organs. "*My friends,*" said Anquetil, when his approaching end was announced to him by his physicians, "*you behold a man dying, full of life!*" On this expression M. Lordat remarks—"It is indeed an evidence of the duplicity of the dynamism in one and the same individual; a proof of the union of two active causes simultaneously created, hitherto inseparable, and the survivor of which is the biographer of the other."

stimulus. The quality of the blood circulating through the brain also influences the development of ideas—if it be deficient in oxygen, delirium of course follows. “The digestion of food introduces a quantity of imperfectly assimilated material into the circulation; until this new material has undergone the necessary changes, and while certain matters, altogether unfit for nutrition, are mingled with it, it is not adapted to excite those states of the brain which are necessary for the proper manifestation of mind; and as it is conveyed to that organ by the circulation, it produces an injurious change in it, and impedes or disturbs the mental functions. Hence the indisposition to mental labour experienced by some persons after meals.”* The same effects are produced, in a more marked degree, by wine, spirituous liquids, narcotics, and the presence of bile or urea in the blood. The organic affections of the brain necessarily and obviously modify the mental conditions, not only by destroying the efficiency of a certain portion of the tissue, but by interfering with the due performance of the organic changes in the other parts.

All this is sufficiently comprehensible, that the organ being deranged, it is no longer capable of performing accurately the behests of the mind. It is much less so, how the derangement of the immaterial essence can affect the organic structure; yet the fact is indisputable. The simplest illustration may be drawn from an occurrence not unfrequent in ordinary experience. A person in perfect health receives a letter containing, perhaps, some fatal news; he drops down, smitten with apoplexy; and after death it is found that the cerebral tissue is torn by an effusion of blood into its substance. Joyous emotion may produce the same or analogous results. A young Frenchman received a complimentary letter from the Directory; he was struck motionless, and his head immediately became affected in a manner from which he never recovered.

The paleness of skin, and weakness of the circulation accompanying the depressing emotions; blushing, and other determinations of blood; excitement of the arterial action, under the influence of anger and the allied passions—all illustrate powerfully and sufficiently the dynamism of mind.

The effect of mental action is forcibly portrayed in Virgil’s description of the Pythoness under inspiration:—

“ Her colour changed; her face was not the same,
And hollow groans from her deep spirit came.
Her hair stood up; convulsive rage possessed
Her trembling limbs, and heaved her labouring breast.
Greater than human kind she seemed to look,
And with an accent more than mortal spoke;

* Müller.

Her staring eyes with sparkling fury roll,
 When all the god came rushing on her soul.
 At length her fury fell; her foaming ceased,
 And ebbing in her soul, the god decreased."

Enough has now been adduced to show the powerful influence which states of mind have upon the body; we must now inquire more particularly what are the probable and the observed effects of continued mental labour upon the physical constitution.

In accordance with the physiological principles already enunciated, the first effect of laborious thought will be an increase in the circulation through the brain, and a more active performance of the nutritive functions in that organ, consisting of decay and replacement of particles. Until the brain becomes accustomed to this increased activity of function, it is to be expected that it will be attended with certain unpleasant consequences, as headache and confusion—just as a person who has fatigued one set of muscles by hours of exercise, will feel pain and stiffness in these muscles until, by frequent repetition, the same actions are performed for even a greater length of time with perfect ease, and without any ill consequences resulting. Rest, then, will (it is to be expected on *a priori* considerations) restore the integrity of the cerebral tissue; and frequent repetition of the same mental gymnastics will render easy and pleasurable what was before so difficult and painful. But it may be objected that the brain is a very delicate organ, and much more liable to suffer from over use than the coarser texture of the muscles. This *may* be true; yet it must be remembered that the brain is to be considered as perfectly adapted to the performance of its functions—thought, perception, volition, &c.—as the muscles are to the performance of their varied motions; and if the texture of the one be so much stronger than that of the other, the mechanical injuries to which it is liable are infinitely multiplied.

Pursuing the same expectant reasoning, we shall be prepared to meet with a modification of the tissue of the brain from continued excited nutrition; and owing to the peculiar mechanical conditions of this organ, it can only be, as a general rule, manifested by an increased firmness of texture. Under long-continued application to one class of subjects, we believe the form of the head may be altered even in the adult.* Functionally, we must, of course expect a continually increasing facility and aptitude in all sorts of mental work; whilst from the concentration of the nervous energy upon thought, the tendency to active exertion

* A friend of the writer has had two casts taken of his own head at the interval of several years, during which time he was entirely devoted to artistic pursuits, which he had adopted late in life. The contrast between the two is very striking in the development of certain parts of the forehead and parietal regions.

will naturally become more and more limited. And here we may consider that we meet with the root of the various evils which have been so constantly attributed to mind labour. Not what is *done*, but what is *neglected*, seems to be the *fons et origo malorum*. The weary eye, the cramped limb, the demands on the body—all are neglected, from the all-absorbing nature of the pursuit, and a train of evils must necessarily result, which are naturally enough, but perhaps too readily, laid to the account of mental labour, but which result with equal frequency from a sedentary occupations whatever.

In young persons, the mode of response to stimulus and requirements on the part of the system is somewhat different, both in nature and extent, from that observed in adults. In early life, and up to the margin of manhood, a great part of the energy of the vital functions is devoted to the direct nutrition and consolidation of the bodily organs. The tissues are soft and yielding, and are capable of being very much modified by external agency. If a strain of unusual force be applied the result is not necessarily, as in the adult, fatigue, which may be readily relieved by rest; but the organ yields, and its efficiency is impaired. Thus the heart over-excited in childhood, will become dilated—the bone on which unnatural pressure is exerted, bends—the ligament often or long stretched, yields and becomes relaxed. Now, the brain being subject to precisely the same laws as other organs, as to nutrition, we shall expect to find here also a difference in its response to the calls made upon its action. Long-continued exercise of the mental functions will be attended, as in the adult, by increased circulation and activity of the nutritive functions of the brain; but there is this difference that the brain tissue here is soft and yielding, and instead of offering the normal resistance to the abnormal afflux of blood, it yields to the pressure, the vessels become enlarged perhaps permanently, and congestion is the result—productive not only of serious consequences for the time being but, by the very fact of its occurrence, inducing an ever increasing liability to its recurrence. Then perhaps the overcharged vessels make an attempt to relieve themselves by pouring out some of their fluid contents, and effusion into the ventricles or on the surface of the brain is the consequence. It is easy to conceive, from these considerations what is the lesson which physiology would teach us in reference to the consequences which may be predicated from intense application in the young. These consequences will be still more marked and serious, if the attention be confined exclusively to one class of ideas; if one faculty be cul-

tivated and urged forward, to the exclusion or neglect of the others.

The testimony of writers on the subject of the effects of mental labour upon the body, is singularly unanimous; none seem to doubt its dire results, especially if commenced young, if pursued long and constantly, and if directed too exclusively to a restricted range of ideas. Dr. George Moore, who has entered deeply into these inquiries, makes the following observations:—

“The brain of a child, however forward, is totally unfit for that intellectual exertion to which many fond parents either force or excite it. Fatal disease is thus frequently induced; and where death does not follow, idiocy, or at least such confusion of faculty ensues, that the moral perception is obscured, and the sensitive child becomes a man of hardened vice, or of insane self-will.

“As the emulative success of classical education is generally dependent on an excessive determination of mind, for the purpose of rapidly loading the memory, it is, of course, attended, for the most part, with a correspondent risk to the nervous system of aspirants after academic honours. Mentally speaking, those who bear the palm in severe universities are often destroyed by the effort necessary to obtain the distinction. Like phosphorescent insects, their brilliance lasts but a little while, and is at its height when on the point of being extinguished for ever. The laurel crown is commonly for the dead, if not corporeally, yet spiritually; and those who attain the highest honours of their Alma Mater, are generally diseased men.* Having reached the object of their aim, by concentrating their energies in one object, an intellectual palsy too often succeeds, and their bodies partake of the trembling feebleness.

“The strongest brain will fail under the continuance of intense thought. All persons who have been accustomed to close study, will remember the utter and indescribable confusion that comes over the mind when the will has wearied the brain.

“The modern system of education appears to be altogether *un-Christian*; undoubtedly it contributes much to swell the fearful list of diseases, for it is founded on an unhealthy emulation, which ruins many

* When the mind has been long and actively engaged—if we may use the term, *overwrought*—a great dislike which is sometimes permanent and invincible may be observed to mental labour of the same nature. We were at a large and celebrated classical school along with several boys distinguished for application, and ranking high in the estimation of an eminent master, by whom they were tasked to the utmost; yet none of them have, to my knowledge, made any figure in life either as scholars or men of business. In the medical profession, we have known students who signally exerted themselves while they were making ready to be examined for a medical degree, but, so far from evincing continued pleasure in scientific pursuits, they have since degenerated into mere traders. In a justly-celebrated university, in which the examination for a Fellowship requires a length and closeness of application which is sufficient to impair the power of most minds, it has been observed that many of the Fellows after their election have lost all their original relish for learning, and have become men of little performance, although originally of great promise.—*Dr. Chagne, on Partial Derangement of the Mind.*

both in body and in soul, while it qualifies none the better either for business, knowledge, usefulness, or enjoyment, but rather, together with the influence of the money valuation of intellect, causes the most heroic spirits of the age to hang upon public opinion and the state of the market. . . .

"We know that determination must vastly excite the brain, when the student or the statesman is induced, by desire for doubtful distinction, to spend his days and nights in the distractions of alternate hopes and fears. Under the strain of these conflicting passions how many a mighty mind sinks into insanity, amidst the mysterious darkness of which some demon whispers close to the ear, 'No hope, no aim, no use in life—the knife is now before you!'"*

These are frightful accusations against study and the present system of education; yet we quote them at length, because they are but the echo and *résumé* of the charges which have been entered against such pursuits, both before and since Festus accused Paul of being mad through much learning. Both amongst ancients and moderns it has been the practice to accuse study, as one of the most frequent causes of madness. Fernelius and Arculanus enumerate "study, contemplation, and continual meditation," as especially tending to mania; "of all men," says Lemnius, "scholars are most subject to it;" and Rhasis adds, "Et illi qui sunt subtilis ingenii, et multæ præmeditationis, de facili incidunt in melancholiam." Origanus says, "contemplatio cerebrum exsiccat et extinguit calorem naturalem, unde cerebrum

* We need make no apology for quoting entire the following passage from the *Scarificator*.—"There is that which destroys more fatally than continued physical exertion. The tendency that over brain work has to destroy the intellect has been long observed. Southey died in darkness from over toil. Walter Scott—he who Anglo-Saxonised the language of Europe, and made a literature—broke down near sixty, and went to his grave with a soft head. 'Tis but the other month a young Scotchman died in London, worn out, his mind a blank from literary toil. And who can doubt it? Angus B. Reach—a clever, witty fellow he was—might have laughed much longer, and made others laugh too, if he had only taken half care of himself!—

'From Marlborough's eyes the tears of dotage flow,
And Swift expires a driveller and a show'—

A soul in ruins—those mysterious, appalling afflictions, laying desolate and waste 'minds that could wander through eternity,' have made us pause and wonder at the awful dispensations of an All-wise Providence, and for a moment doubt their justness. The continued tear and wear, the constant demand for more, more, more, sets the cerebral mass 'on fire.' 'My brain is burning—I can bear life no longer!' said the author of the Old Red Sandstone, and shortly ceased to exist. Strange, some said, how Providence should have allowed such a man to pass away from earth in such a manner; but when we consider the subject philosophically, there is nothing mysterious in it, however much we may regret the circumstance. Providence acts by general, not by special laws. Hugh Miller was, intellectually, a giant, and, physically, possessed a frame of iron; but he violated the laws which govern health—he demanded more work from his brain than it could well perform—it reeled and staggered, but it reeled and staggered in vain. He pulled away, and lashed it into fury, and he perished to gratify his genius and his ambition!"

frigidum et siccum evadit quod est melancholicum. Accedit ad hoc, quod natura in contemplatione, cerebro prorsus cordique intenta, stomachum heparque destituit, unde ex alimentis male coctis, sanguis crassus et niger efficitur, dum nimio otio membrorum superflui vapores non exhalant." In this, spite of its antiquated physiology, there is much sound sense, still indicating in reference to the subject at issue, that it is the omissions, not the commissions, that are the chief sources of evil. Machiavel, however, holds the direct influence of study in weakening the body, dulling the spirit, and abating the strength and courage. Quaint old Burton relates that "a certain Goth, when his countrymen came into Greece, and would have burned all their books, he cried out against it, by no means they should do it, 'leave them that plague, which in time will consume all their vigour and martial spirits.'" Descuret, in his "*Medicina delle Passioni*," speaks of the results of the study mania (*mania dello studio*) as loss of memory, epilepsy, catalepsy, madness, sudden and premature death; saying that "*lo studio, cibo dell'anima, esige per parte nostra grande sobrietà, se vogliamo che non si trasformi in veleno, la cui azione midiciale non è meno funesta al morale che al fisico.*" Few writers now venture to speak of study with St. Augustine as "*scientia scientiarum, omni melle dulcior, omni pane suavior, omni vino hilarior;*" or with another old worthy, "*Studia senectutem oblectant, adolescentiam alunt, secundas res ornant, adversis perfugium et solatium præbent, domi delectant,*" &c., and yet both these had tried it to an extent not often reached in these modern times. To return to modern writers; Müller states as the physiological effect of excessive exercise of the mind, that it "*diminishes the activity of the nutritive processes;*" we find him remarking however, shortly afterwards, that "*the culture of the mind by observation and varied attainments has an ennobling influence on the corporeal frame, and particularly on the lineaments of the face.*"

M. Tissot brings an enormous list of accusations against the over application of the mind, with many interesting illustrative cases. A young gentleman had given himself up to metaphysical pursuits, which he pursued with ardour, notwithstanding that he felt his health failing. At last he fell into such a condition, that he appeared to see nothing, hear nothing, and spoke not a word for the space of a year. He says that he has seen "very promising children, who have been forced to study so constantly by severe masters, that they have become epileptic during the rest of their lives." On this subject Sir H. Holland says, "In the course of my practice I have seen some striking and melancholy instances of the exhaustion of the youthful mind by this over-exercise of its faculties. In two of them, unattended by any

paralytic affection, or other obvious bodily disorder than a certain sluggishness in the natural functions, the torpor of mind approached almost to imbecility. Yet here there had been before acute intellect, with great sensibility; but these qualities forced by emulation into excess of exercise without due intervals of respite, and with habitual deficiency of sleep."

Galen mentions a grammarian who was seized with an epileptic fit when teaching or thinking intently; and Hoffman mentions a young man who had a momentary fit, whenever his mind or his memory was overloaded. Petrarch suffered in a similar manner. The evils charged further by M. Tissot upon intense study are gout, premature baldness and grey hairs, phantasms, delirium, mania; "tumours, aneurisms, inflammations, scirrhusities, ulcers, dropsies, headaches, drowsiness, convulsions, lethargy, apoplexies, and the want of sleep," besides many other secondary results.

But it is time to leave this enumeration of evils, and to inquire with what amount of justice they are attributed to mental work,—under what counts of the indictment mind plead guilty—whether there are any, and what, extenuating circumstances—to what the verdict of not guilty, or at least not proven must be returned—and whether there may be found some remedy of easy application for the evils which confessedly exist, however caused.

We will commence with an examination into the circumstances connected with education in early life, suppose up to the age of 15. It is not to be denied, and we have already given in our adhesion to the opinion, that intense study in early life is likely to be very hurtful in its consequences; and the practice of forcing and urging the faculties of children into premature development cannot be too strongly and earnestly deprecated. Yet we believe that this practice is by no means so common as has been represented.*

That children are overworked occasionally is notorious; but for this there are other causes in operation besides either force or the principle of emulation. The recent publication of the regulations of the University of Oxford "Concerning the examination of those who are not members of the University," may fairly be supposed to furnish an average standard of the requirements of

* The writer is intimately connected with one large establishment where upwards of two hundred youths from eight to twenty years of age are educated; the inducements to study and to excel are strong and valuable, but the discipline is mild and judicious. During ten years of careful observation, he can recall but three or four instances of any injury resulting from severe mental application: none in which more than a temporary cessation from study has been requisite; and with one exception, all occurring in subjects where there was every reason to suspect a morbidly excitable organization. The exception was that of a naturally very dull boy, with a strong desire to overcome difficulties, which, in fact, were only such to him.

education for boys under fifteen and young men under eighteen ; and a perusal of these will at once show that boys of average capacity need exert no extraordinary pressure in preparation. Reading, writing from dictation, parsing, short composition, and the first four rules of arithmetic are the substance of the first five articles : the sixth and seventh comprise a very elementary knowledge of geography, and English history. Eight subjects are then given for selection ; the candidate must be examined in one at least, and not in more than four, to be chosen by himself. Latin, Greek, French, and German are the first four subjects, in each of which the exercise is simply the translation and parsing of a passage in one of the most elementary school books, and in all but Greek, the translation of an English passage into the others. The fifth is mathematics, including the first two books of Euclid, arithmetic, and simple equations. Sixth, elementary mechanics. Seventh, chemistry. Eighth, botany and zoology. In all this there is nothing very oppressive, even if required from boys of thirteen rather than fifteen ; but of course the curriculum of many of our schools is very much more comprehensive than this ; and in them we meet not unfrequently with over-tasked brains, and the consecutive train of evils. But how has this been brought about ? Is it necessarily by compulsion, or the goad of emulation ? or may there not be a much deeper source of the evil ?

Two boys, brothers, enter a large school, are placed on the same form, and are subject to the same regulations, the same tasks, the same inducements. One is studious, cares little for outdoor amusements, and perhaps breaks down in health even before accomplishing the object of his ambition. The other is more given to sport or play than to work ; he *may be* a blockhead ; but on the other hand he *may* take a respectable or even a high position. The question may fairly be asked—"Whence arose this difference ?" Not, clearly, because one was goaded and the other not. Why did the first boy prefer his books to the football or cricket ? Plainly because his organization was weaker in stamina than that of the other ; exertion of an active character was a toil ; the mind *or* the body must be occupied, and as he cannot exert the one, the other must bear the burden. On some occasion, by momentary excitement, he is drawn into some arduous play. Look at him when it is over. He sits down upon a stone, or leans against a wall, his face almost ghastly in its pallor, his hand pressed to his side, his temples throbbing, and gasping for breath. He returns to his books, to which he thenceforth clings as his best friends ; yet this mischief is not the *result* of his mental application, both the one and the other are the result of a feeble physical frame, which is now undergoing a process of probation, of which none can predicate the termination.

He may break down, or he may become an intellectual giant; but should the former be the case, study, for which he was apparently better fitted than for anything else, can scarcely be blamed. Would not an active life have been a still shorter one? For such constitutions there is much hope, if they can be placed under intelligent care, and individually watched, guarded, and assisted; but amongst the masses this is as a rule impracticable; there is no resource but the school, where general laws must be in force; and it is a question whether, were the standard of requirements lower, this individual class of mind would be less subject to pressure.

We have nothing to say on the subject of cramming the minds of mere infants with heterogeneous learning. The evils of such a course are utterly incalculable;* but so obvious that those who do not instinctively recognise them, would most probably be impervious to any argument. The stunted and deformed mind and body of the child will presently furnish a reproach bitter enough, and a lesson too late to be practical.

There is one other consideration of extreme importance to be urged in extenuation of the morbid influence supposed to be exerted by early mental culture upon life and character. We have in a previous essay,† pointed out, that in certain portions of all classes of society there are elements of degeneration at work, tending to the extinction of races or families. We are perpetually meeting with the last term of these vanishing series, and witnessing the circumstances attendant upon their final disappearance. Young people in all ranks, with and without education, die daily, the victims of these hereditary influences; certainly, we may affirm, with much greater proportional frequency in those classes where education is, and must necessarily be the exception rather than the rule. When those die whose minds have been left to lie fallow, we attribute their death probably to the real cause; but under circumstances of individual taint precisely similar, when the studious child dies, we ascribe the event to their studies in great measure. It is a note-worthy phenomenon that amongst these degenerate beings, previous to extinction, there is often a remarkable development of certain faculties,

* There are certain exceptional cases on record, proving that extreme precocity is not necessarily and invariably connected with early decay. One such is that of the archæologist Visconti, who died in 1818, *stat.* sixty-seven. He knew his alphabet at eighteen months old, and could read Latin and Greek fluently before completing his fourth year. Bentham read Rapin's *England* when three years old, and at eight was a proficient on the violin. He lived to the age of eighty-five. Goethe, Scott, and Franklin, each in early childhood evinced decided indications of the talents for which they were distinguished in after life. Two of them lived to extreme old age, and the third to sixty-two. Many other instances might be adduced, but these are sufficient to illustrate the principle.

† On the Degeneracy of the Race. April, 1857.

amounting to genius. This is alluded to in a passage from M. Morel's work previously noticed:—

“Il existe des individus qui résument dans leur personne les dispositions organiques vicieuses de plusieurs générations antérieures.

“Un développement assez remarquable de certaines facultés peut quelquefois donner le change sur l'avenir de ces malades ; mais leur existence intellectuelle est circonscrite dans certaines limites qu'ils ne peuvent franchir.”

Such cases as these have generally a short and brilliant career ; and it is of such that the remark is so frequently made, “What promise of future greatness is here nipped in the bud !” Than this, nothing can be as a rule more mistaken—the fiat of early dissolution is written on the degenerate organism ; a lurid phosphorescent light accompanies its decay, a light of which decay is as necessary a condition as is the marsh to the *ignis fatuus* ; and if by any means this downward tendency be stopped, it is extremely rare that the autumn of life fulfils the promise of its spring. The life is short, not *because* the intellectual development is precocious or forced, but it is short *and* bright from a common cause deeply engrained in the original exceptional organization.

There are, however, certain unhappy cases where the ambition for intellectual distinction is *directly* concerned in destroying health ; these are they, where the ability is not equal to the aspirations, and where the feeling of incompetence leads continually to more and more strenuous exertions. The boy of talents below mediocrity, and with a strong desire (from whatever motive) to excel in certain pursuits, is indeed in a pitiable case,* and will rarely escape serious injury. And this is by no means confined to early life. We know of few more melancholy objects for contemplation than a man—or, as it very frequently happens, too, a woman—inspired with a love for a certain art, poetry, painting, or music, mistaking this love for talent, and wearing out life in hopeless efforts at performance—ever failing, yet sometimes happily unconscious of the failure—trying again and again, yet ever again coming far short of even their own imperfect ideal—finally succumbing, worn out by constant attrition against the rock of the impossible. How many of these bruised and broken spirits will the experience of every thoughtful and observant man suggest to him !

If we now inquire more particularly into the circumstances attendant upon university education, and the charges brought against the severity of the requirements for high honours, we shall

* The case is strictly analogous to that of a weakly or lame boy wishing to excel in running or jumping ; a sad instance of which kind of perverted vanity was observed in Byron.

find that very much the same limitations are requisite in adoption of these views, as in the case of children. Men under the course not from the direct influence of mental application, but because they have not the stamina to bear even moderate exercise of the mind—because they are of degenerate constitution, favouring irregular circulation and congestions—being such, their aspirations are too high for their powers—because, feeling all this, they are prone to neglect the ordinary rules of hygiene. The pale, timid student, who labours under continual fear of being plucked, and by night and by day crams his mind with all sorts of miscellaneous knowledge, it would require a much more powerful intellect to analyse and arrange—he can with no justice be held up as a proof that the requirements of his university are too high.

It is, of course, impossible to say, with any accuracy, what proportion of our youth do break down under the strain on mind and body attendant upon the reading for honours. We are disposed to deny that many such instances do occur; but still must maintain, that, not what is *done*, but what is left *undone* is to blame. The woodman, every now and then, pauses to sharpen his axe—let him neglect this, and continue to strain against the unyielding tree with his blunt instrument, and by and by it breaks. Hear how Ficinus comments upon the thoughtlessness of the bookworm,—

“Solers quilibet artifex instrumenta sua diligentissime curat, cillos pictor; malleos incudesque faber ferrarius; miles equos, venator, auceps aves et canes, cytharam cytharædus, &c.; soli munus mystæ tam negligentes sunt, ut instrumentum illud quo mundum versum metiri solent, spiritum scilicet, penitus negligere videantur.”

But is not the alarm, on this score, even too great? An English writer, from whom we have already quoted, answers this question very positively:—

“The mothers and merchants of England need not be in so much alarm for the sanitary condition or the practical character of the training of the rising sons whom they may have committed to the English University system. Reading men at the universities, taken as a class, are far from being reckless about the state of their bodies, that they are generally very careful of their health. They are more regular in their hours and in their exercise, more abstemious in their diet, more free from vicious habits which injure the constitution. They imitate the candidates for the Olympic wreath in their sobriety and continence, if not in the more active part of their training. They will venture to say nobody would know them from their fellow-students by their cadaverous appearance. They have among them, as far as observation extends, at least their fair proportion of men who live up to the motto, ‘to be ever foremost’ in the cricket field, the boat-race

the tennis-court, as well as in the Senate House or the Schools. So far from being taught by their preceptors to strain their minds to the utmost, and take no care of their bodies, they are constantly warned of the necessity of keeping themselves in good physical order by tutors, private tutors, friends, and all who are interested in their success. Men have the wit to see that good health and spirits are necessary to carry them through the labours of an examination, and that they cannot study to any purpose without a clear head, or secure a clear head without a good digestion and sound sleep. We believe the life of a regular reading man at Oxford or Cambridge, with his eight hours work a day (and no more is needed for high honours), his daily air and exercise, his cheerful society, and his reading party in the Highlands or at the seaside in the long vacation, to be as healthy a life as any—at least as healthy as life in a counting house or a solicitor's office. If there is a little exhaustion immediately after the last examination, three months with a knapsack among the Alps generally sets all right again. The victims of wet towels and strong green tea are, generally, not regular reading men, but gentlemen who have been devoting themselves exclusively to their physical development till within a few weeks of their 'little go,' and are compelled, at last, to put on the steam in preparing for that event. Of course, men are sometimes fools enough to overwork themselves at classics and mathematics, as they are sometimes fools enough to overwork themselves at law or physic; but for one man who has been injured by reading at the University, we think we could point to two who have been injured by boat-racing, and four who have been injured by intemperance, and the other vices to which idleness leads.

"University education is very apt to get the credit of destroying constitutions which, in point of fact, it only finds weak and leaves as it found them. A man who comes up to Oxford or Cambridge with a confirmed and hereditary tendency to consumption, will not be saved, by his Oxford or Cambridge accomplishments, from sinking into an early grave. Nor must a man expect that, by having taken a good class, he will be rendered physically equal to employments to which he and everybody connected with him would otherwise have known that he was physically unequal. A sickly and sensitive youth shows intellectual power, and gets a good place in the class list. Immediately he or his friends take it into their heads that he is to be Lord Chancellor; and he is sent, as Lord Eldon said, to 'live like a hermit and work like a horse,' in order to realize that moderate object of ambition. Being by nature absolutely incapable either of living like a hermit or of working like a horse, he of course breaks down; and then his failure is attributed to University education. If the poet Cowper had been, as he well might have been, a classical first classman at Oxford or Cambridge, instead of being brought up in the most practical way in a lawyer's office, Oxford or Cambridge would have borne the blame of his inability to pass his life cheerfully in lonely chambers in the Temple, and to compete with hard strong natures in the trying arena of the Bar. The fact is, that these men do not lose physical power by being put through a good course of reading—for the simple reason

that they never had the physical power to lose. They gain intellectual power, which they might otherwise have never possessed, and are thereby enabled to be at least of some use to the world."

It must not be denied, however, that the tests applied at the present day in our principal universities, to ascertain the attainments of their alumni, are serious matters—so serious that men should have a firm conviction of their strength, before entering so arduous an arena. Strong healthy mind, good "working constitution," temperance in every respect, even in work—all these are essentially requisite. For the brain tissue of a large portion of these workers is still in a condition not so inured and habituated to work that it has become easy, and even second nature—it is still labour.

Perhaps it will not lead us too far from our principal design, to take a survey, as brief as the nature of the subject will permit, of the sort of ordeal through which the candidates for honours at the universities of Cambridge, Oxford, and London, have to pass, chiefly as connected with the B.A.

The first to which we open is the Senate-house examination in January last, at Cambridge—the mathematical tripos. Three hours in the morning of the first day are allowed for the answering of twelve questions, such as the following (No. 8):—

"Prove that in the parabola $SY^2 = SP \cdot SA$.—

A circle is described on the latus rectum as diameter, and a common tangent QP is drawn to it and the parabola; shew that SP, SQ, make equal angles with the latus rectum."

The mathematician will see that although there is nothing very obscure in this, yet the labour of answering twelve such questions in three hours requires a clear head, a ready method, great previous practice, and last though by no means least, a hand of almost lightning velocity, merely to do the mechanical part. It is true that the examiners state, if asked, that *all* the questions need not be answered; that more are asked to give variety, and to afford equal opportunities to different orders of students; yet the aspirant after the highest honours will strive after all; we *know* of instances where all has been accomplished; yet the labour is prodigious.—In the afternoon of the same day, two hours and a half were devoted to twelve other questions; the one following is but the half of No. 10:—

"Prove the formula

$$\cos. (A - B) = \cos. A \cdot \cos. B + \sin. A \sin. B.$$

A being greater than B, and each angle less than 90° ."

On the second day the same hours were devoted to twenty-four other questions, of which one must serve as a specimen, it being neither more nor less elaborate than the rest.

"A ray of light passes through a prism in a plane perpendicular to its edge; shew that if ϕ and ψ be the angles of incidence and emergence, and i the refracting angle of the prism, the deviation is equal to

$$\phi + \psi - i, \text{ or } \psi - \phi - i,$$

according as the incident ray makes an acute angle with the face of the prism towards the thicker end or the edge. Under what convention will these expressions for the deviation be all represented by $\phi + \psi - i$, and with this convention for what value of ϕ will ψ change sign?"

On the third day the same, except that in the afternoon there were twenty-two questions, of such a nature and complexity that it appears utterly impossible that the demonstrations to one half of them could even be copied out by the quickest stenographer.

Five more days were similarly occupied, but it would scarcely interest the general reader to follow the course minutely. For those interested in the pursuits and training of our rising graduates, we make only one more quotation, this being part only of one of the last day's questions.

"Assuming the formulæ

$$l a + m \beta + n \gamma = 0$$

$$\frac{l}{a(\sigma^2 - a^2)} = \frac{m}{\beta(\sigma^2 - b^2)} = \frac{n}{\gamma(\sigma^2 - c^2)}$$

investigate the equation of the wave surface in a bi-axial crystal."

Meanwhile the classical tripos requires the translation of Greek and Latin into English and *vice versa*; the conversion of a passage from Marlowe's "Queen of Carthage" into Greek Iambics, and another into Greek Hexameters; a passage from Cowley, into Latin Hexameters; four verses of the "Hymn to Light," into Latin Lyrics, &c., &c.; and an elaborate series of historical and philological questions.*

These are mental gymnastics of no light order, and he who can come out of the ordeal unscathed and with an honourable position, has shown himself, *ipso facto*, to be *great*. It has been very frequently urged that those men who have attained the highest university rank have rarely been distinguished in after life. We are not prepared to disprove a statement which has been reiterated until it has almost become a recognised dogma; but neither can

* We have given so much space to the Cambridge examination that we have thought it not desirable to enter into any analysis of those of the other two Universities; and in fact there would be but little variety. As is well known, Cambridge is more especially mathematical and Oxford more classical; London is but little behind either in each department. He who could take honourable rank in one, would play a respectable part in either of the others. This is only so far as the general degrees of B.A. and M.A. are concerned. The special degrees, in medicine particularly, require examinations of incomparably greater severity in the London University than in either of the elder sisters. Perhaps there is no more severe test applied anywhere, at least, so far as theoretical knowledge is involved, and practice so far as is possible also.

we receive it as wholly true. Are we mistaken in supposing that Sir R. Peel was almost at the top of the academic tree? And probably many other of our ablest statesmen, could we but refer conveniently to their earlier history. Yet even supposing it to be the case, that the world hears little subsequently of the senior wranglers and the "double first" men, is it necessarily because health and intellect are ruined? Rather may we suppose that the studious and literary habits acquired during years of close application have induced tastes and feelings utterly opposed to the wear and tear of public life; and that the men thus trained prefer rather to occupy themselves with the facts and speculations of nature and philosophy, than to take part in the troublous warfare of politics or polemics.

Are these requirements then, as has been so often said, too severe? Of the most weighty order they are certainly; but we must hesitate before pronouncing them to be too much so. What indeed is a test of this nature intended for, if not to distinguish between man and man? Crowds of men could pass through a lighter ordeal with perhaps equal merit and distinction; and from the nature of things it is inevitable that the severity of the test must be increased till the few can be sifted from the many. Moreover, we must remember that the honour is for those who *can* fulfil the conditions, not for those who *cannot*;—it is for the purpose of selecting the strong and clear-minded man and the one who is capable of much hard work; for such men are wanted in the world, as well as the strong-limbed and hard-handed. All minds cannot accomplish the same feats, no more than all physical frames can rival the material development of a Lydon or a Tetraides. The following is from a recent leader in the *Times*, and well illustrates the various kinds of work and constitution:—

"There is perhaps no man living of whom more facts of labour and triumphs over the frail *physique* of humanity are recorded than of Lord Brougham. Legends of this sort have gathered round him like a Hercules. There is a legend that he once worked six continuous days—*i. e.*, 144 hours without sleep, that he then rushed down to his country lodgings, slept all Saturday night, all Sunday, all Sunday night, and was waked by his valet on Monday morning to resume the responsibilities of life, and commence the work of the next week. A man must, of course, have a superhuman constitution who can do, we will not say this particular feat, which is perhaps mythical, but feats of this class, and probably the greatness of our great men is quite as much a bodily affair as a mental one. Nature has presented them not only with extraordinary minds, but—what has quite as much to do with the matter—with wonderful bodies. What can a man do without a constitution—a working constitution? He is laid on the shelf from the day he is born. For him no munificent destiny reserves the Great

Seal, or the Rolls, or the Chief Justiceship, or the leadership of the House of Commons, the Treasury, or the Admiralty, or the Horse Guards, the Home-Office, or the Colonies. The Church may promote him, for it does not signify to the Church whether a man does his work or not, but the State will have nothing to do with the poor constitutionless wretch. He will not rise higher than a Recordship or a Poor Law Board. 'But,' somebody will ask, 'has that pale, lean man, with a face like parchment, and nothing on his bones, a constitution?' Yes he has—he has a working constitution, and a ten times better one than you, my good friend, with your ruddy face and strong muscular frame. You look, indeed, the very picture of health, but you have, in reality, only a sporting constitution, not a *working* one. You do very well for the open air, and get on tolerably well with fine, healthy exercise, and no strain on your brain. But try close air for a week—try confinement, with heaps of confused papers and books of reference, blue books, law books, or despatches to get through, and therefrom extract liquid and transparent results, and you will find yourself knocked up and fainting, when the pale lean man is—if not 'as fresh as a daisy,' which he never is, being of the perpetual cadaverous type—at least as unaffected as a bit of leather, and not showing the smallest sign of giving way. There are two sorts of good constitutions—good idle constitutions, and good working ones. When Nature makes a great man she presents him with the latter gift. Not that we wish to deprive our great men of their merit. A man must make one or two experiments before he finds out his constitution. A man of spirit and metal makes the experiment, tries himself, and runs the task, as a soldier does on the field. The battle of life and death is often fought as really in chambers or in an office as it is on the field. A soul is required to make use of the body, but a great man must have a body as well as a soul to work with. Charles Buller, Sir William Molesworth, and others, are instances of men whose bodies refused to support their souls, and were therefore obliged to give up the prize when they had just reached it. And how many hundreds or thousands—if one did but know them—perish in an earlier stage, before they have made any way at all, simply because, though they had splendid minds, they had very poor bodies! Let our lean, cadaverous friend, then, when the laurel surmounts his knotty parchment face, thank Heaven for his body, which, he may depend upon it, is almost as great a treasure as his soul. Nature may not have made him a handsome man, but what does that signify? 'She has made him a strong one.'

With this remarkable instance, and many others to which we shall have occasion to refer, before us, we do not hesitate to express again our opinion that the effects of mental application, even of a severe character, are not in themselves so generally serious as it is now the fashion to consider them; and that the greater part of the evils which follow head-work are due to secondary causes, against *some* of which at least it is easy to guard.

The first of these which we shall allude to is the too sudden

adoption of extreme studious habits. A man who has for some time neglected his studies, finds himself unprepared as the time of examination approaches; at once he changes all his habits, applying himself the greater part of the day and night to work. Naturally enough, the system rebels against this abuse. The muscular tissue will not bear such treatment; let him try to walk ten or twelve hours in one day without training, and gradually increasing the amount of exercise; and he will be most painfully reminded that organization has its laws which cannot be violated with impunity. The brain tissue cannot be expected to be *more* enduring, or *more* tolerant of such liberties than this; let us but treat it as we would any other organ, then we shall find it as ready to act, and its actions as little hurtful or painful as those. The mind must be *gradually* inured to labour, and then instead of an enfeebled palsied development, we may hope to become able to perform mental athletics to almost any extent without danger, and with ease and profit. It is a most common mistake, in considering the mind as immaterial, to lose sight of this most important fact, that it *acts always* and *exclusively* through the medium of a material tissue; which being, on the one hand, subject to an immaterial essence, does not, on the other, thereby lose its relations to the material organism of which it is an important part.

Another source of evil is the neglect of the corporeal requirements for a great number of hours consecutively. It is almost certain* that the same amount of work which often proves injurious by its continuity, might be achieved with ease, if it were divided by *short* intervals of rest and refreshment. We appeal to the experience of all students, if during their earlier efforts nature did not give broad hints of requiring repose and restoratives;—the stomach asserts its right to food at proper intervals, but it is put off—"go thy way for this time; when I have a convenient season . . . ;" then when the exhausted powers refuse any longer to work without fuel, the meal is but a business to be accomplished as speedily as possible; the food is swallowed unmasticated, and the stomach, loaded perhaps with a mass of indigestible material, is further impeded in its operations by the immediate resumption of a cramped, constrained, and compressed attitude. Indigestion with its thousand sons is the natural result. Then the head aches, and its hint is evaded by a wet towel, and perhaps an irritating stimulant, as a cup of strong tea or coffee; under the influence of which, temporary power, or a semblance of it, is regained. The weary eye, the aching limb, the general

* The writer would say to the earnest inquirer how much work he can get out of his brain, and how he can do it most safely, that these hints are not drawn from theory. *Credo experto!*

febrile condition—all these are disregarded; day by day the same process is repeated; until the wonder is, not that the brain gives way at length, but that it has held out so long—longer, we venture to say, as an ordinary rule, than any other organ would have done under an equivalent amount of ill-treatment. Yet in all this, the fact of mental labour simply is not more to be blamed than is commerce for the great number of deaths brought about by the all-absorbing desire of gain, the *auri sacra fames* which operates in precisely the same *secondary* manner upon the health and character.

The neglect of fresh air, regular exercise, and early rising, enters into the same category of the secondary causes.

Yet there are other conditions attendant too often upon a literary life, which are inherent in our nature, and in the existing order of our social arrangements, which exert a most important and gloomy influence upon the reaction of mind upon the body; such are the co-operation of poverty, of wearing anxiety, of the depressing passions and emotions generally; and finally, in an overwhelming majority of cases, the pre-existence of elements of degeneracy and disease in the organism.

"Poverty," says old Burton, "is the muse's patrimony; and as that poetical divinity teacheth us, when Jupiter's daughters were each of them married to the gods, the muses alone were left solitary, Helicon forsaken of all suitors, and I believe it was because they had no portion."

*Calliope longum coelebs cur vixit in ævum ?
Nempe nihil dotis, quod numeraret, erat.*

Literature is a "good staff but a bad crutch,"—fascinating, cheering, and enlivening, tending to promote life, health, and an equable mind in those who pursue it for pleasure; but woe to those who are dependent upon their brains for daily bread—thrice woe, if others are dependent upon them. In straitened circumstances, which preclude the possibility of obtaining almost even the necessities of life—these only to be got by unremitting toil—under the stern necessity for doing so much brain-work in so many hours—for coining, in short, so much nerve tissue into so much, or rather so little, money—pale faces around him asking for bread and shoes—a partner of his woes vainly trying to conceal that she has not wherewithal to procure the day's dinner—who can wonder that, under privation and misery such as this, the powers fail?—who can wonder, or who can venture to blame him, if he sometimes looks forward to the coming of the "Pale Phantom" with something of hope?—who dare but veil his face and pity him if he in some dark moment courts his coming? And when, having to the end kept his faith in his Maker's jus-

tice, and fought his good fight, he hears a voice saying "Well done, good and faithful servant," shall we then wonder that he can willingly leave wife and child, to be at rest?

The presence of the seeds of disease and degeneration in the system has already been noticed as a fruitful source of the deaths that so often occur apparently under the influence of studious habits. If these co-operate with the last-mentioned class of influences, the lethal effects will be much more rapid: then early death, or a life of wretchedness often terminated by suicide, is an almost necessary result.

These are sad but apparently inevitable consequences of the conditions of society and of our race. There is, and ever will be, a loud demand for intellect and its labours,*—there exist, and ever will, poverty, and wretchedness, and disease;—in the exhaustless combinations of society these will at times become associated; doubtless for wise and benevolent purposes these things are appointed as amongst our probation experiences; it is not our province to attempt here to "vindicate the ways of God with men;" and an investigation into the proximate causes

* We again quote from the thoughtful writer in the *Saturday Review* of November 7th:—"The ascendancy of mind over physical strength is civilization. Everybody knows that Thersites would now bring down Achilles half a mile off with an Enfield rifle. We need not quote Macaulay's remarks—as brilliant as his remarks usually are, and more true—about 'the hunchback dwarf who urged forward the fiery onset of France, and the asthmatic skeleton who covered the slow retreat of England' at the battle of Landen. Read the chivalrous and romantic Froissart's account of the deliverance of France from the English invaders—you will see nothing but the hand of Bertrand du Guesclin. Read the true history of the time, and you will see that the real spring of all was the head of that feeble invalid who conquered the two Edwards, to their great amazement, without ever mounting a horse or drawing a sword. It was the dawn, yet unperceived by the Troubadour, of the triumph of intellect over men-at-arms. And power having passed from the body to the mind, ambition itself (to say nothing of higher motives) will mainly cultivate that which is now the real source of power. The development of physical strength will be comparatively neglected, and the body, in this sense, will be sacrificed to the mind. Our material part still asserts its claims, as all who have tried to work with the brain under great physical suffering or debility must know too well; but they are the claims of a servant, not of an equal. Nay, even those gifts of mind which are most akin to and most dependent on bodily health, have a tendency to fall under the dominion of others which are of a more eccentric, and, as a man of business might think, of a morbid kind. You naturally picture to yourself the ideal of humanity—the great man—as a noble bodily presence, full of health and vigour, with a mind as healthy and vigorous as its abode, with all the faculties and acquirements equally balanced, and the soundest judgment sitting supreme over the whole. Look at the records of history and see how far this ideal is fulfilled by the men who have really moved the world. Consider the strange and unsightly caskets in which the rarest and most potent essences of nature have been enclosed. 'Is this humanity,' the practical writer in the *Times* would say of Socrates in his day-long trance of thought, or the macerated and visionary Luther in his Augustinian cell. No, strictly speaking, it is not humanity. It is the upward aspiration of a being of whom mere humanity is the lower and grosser part. It is, in one sense, a sort of disease. But to cure that disease would be to reduce mankind to a mass of money-getting clay."

of these evils would lead us into the fathomless abyss of an inquiry into the origin of evil. We turn to more practical points.

As there are conditions of depression and deterioration in the system which preclude the possibility of long-continued mental labour with impunity, there is, on the other hand, a hardy, vigorous, excited state of rude health, which, so long as it lasts, is as great a barrier to successful hard work. It is not long since we saw a hard-working student, of good sound constitution, who had taken the relaxation of a Continental tour for a few weeks, and who complained on his return that he could not work—his body was too vigorous. Again, the overworked body reacts as powerfully upon the mind, as the overstrained mind does upon the *physique*; hence the toils and anxieties of an arduous professional life too frequently incapacitate the man of moderate powers for any striking intellectual efforts.

It is necessary and useful to inquire what classes of temperament are the best fitted for mental labour, and the most likely to produce satisfactory results. We say, without much hesitation, the Phlegmatic and the Choleric.

Müller, who takes a mental and metaphysical rather than a corporeal view of the various temperaments,* describes the Phlegmatic as one whose "mental strivings or emotions are neither intense nor enduring."—"In persons of this temperament, ideas are conceived with as much rapidity as in others, and there may be the same powers of mind as in other temperaments. When the intellectual faculties are good, this temperament will render a person capable of more difficult acts, and successful in a more extraordinary degree, than were his impulses rendered stronger by a more passionate temperament" (e.g., the sanguine or melancholic). "Such a person, whose mental strivings or emotions are not violent, remains cool and undisturbed, and is not drawn away from his determined course to the performance of acts which he would regret on the morrow;—he is more sure and trustworthy than persons of an opposite temperament, and his success more to be depended on: in times of danger, and at moments of importance, when good judgment, calculation, and reflection, rather than quick action, are needed, his powers are all at his command. When rapid action is required, the phlegmatic person is less successful, and others leave him behind; but when no haste is

* "According to my view, the temperaments are entirely dependent on the different degrees in which different individuals are disposed to the strivings and emotions arising from the depression or excitement of the feeling of self; in other words, in the different degrees of disposition to the states of desire, pleasure, and pain, and on the extent to which these states of the mind are promoted by the composition and states of the organs of the body."—Müller's "Physiology," translated by Baly.

necessary, and delay is admissible, he quietly attains his end, while others have committed error upon error, and have been diverted from their course by their passions."

In the Melancholic and the Sanguine, the chief tendencies of the mind are to the feeling of pain in the former and pleasure in the latter. The Melancholic person suffers impediments to depress and dishearten him, and a corresponding effect is produced on the physical frame. The Sanguine is quick to conceive, but not stable enough for execution; full of purpose, but fickle and volatile in performance. The system is more formed for activity than for study.

The Choleric has not the indifference of the Phlegmatic, but compensates for this want by the intensity and durability with which he can act. His powers of reflection are less, but his action is prompt, decided, and unhesitating. He has a powerful will, and not given to failure where his mind is once fixed on success. Under the influence of "ambition, jealousy, revenge, or love of rule," his powers seem to have no limits.

The nearer is the temperament, then, to the sanguine or the melancholic, the more care will be required in the adoption of intensely studious habits; whilst the choleric and the phlegmatic person may with comparative safety, and with ordinary regard to the rules of hygiene, follow the bent of his inclinations—the one, because his constitution is specially adapted to quiet and sedentary pursuits; the other, because his will is sufficiently powerful to govern the functions.

But it is time to inquire whether a negative defence of mind is all that can be brought forward, or whether there are not positive advantages and conservative influences attendant upon mental labour which tend to ameliorate the evils of temperament and constitution, and to prolong life. It is a matter of daily experience, how powerful is the influence of mental application in relieving bodily pain; how pre-eminently successful it is in soothing the ruffled, troubled spirit, and in softening the asperity of corroding anxiety and care. If the student be poor, his books are his riches; and whilst living and communing with sages and philosophers, he has no troubles about the state of the funds or the rates of discount. If he be rich, his studies are an omnipotent resource against *ennui*, and will (if aught can do so) prevent that burning desire for *more* which riches so often bring with them.

But mental occupation has a more direct and specific influence upon certain hereditary maladies, of which we may adduce some instances. Burton, himself addicted to the disease, in his "Anatomy of Melancholy," strongly recommends study as a remedy; and by the catalogue which he gives of things to be inquired into, he evidently does not consider that a man need limit him-

self. Finding his health and mind failing, he took to writing this work—a perfect miracle of learning, and doubtless by its assistance he lived to the age of sixty-four. Poor Cowper's melancholy was greatly relieved for a considerable time by the writing of the "Task." With the inherent vices of his constitution, and his tendency to the worst form of hypochondria, it is very doubtful whether, without mental labour, sometimes of a severe and almost compulsory character, he would have lived to the verge of seventy. Byron found a necessity for writing to preserve the integrity of his mind. "I must write to empty my mind, or I shall go mad." Accumulated instances would add nothing to the force of the argument; but no one who has suffered in mind or body, and has had resolution to try severe study as a remedy, will doubt its efficiency.*

Let us now inquire what testimony history bears to the longevity of men whose lives have been essentially intellectual. Some objections may be made to this course of investigation; thus we can only quote the most remarkable instances;—we cannot in many cases say how much of the life was purely *studious*—we cannot, in our limits, review the labours of these men—we cannot enumerate those who died young, nor still less can we estimate how many, who would otherwise have been great as these, have failed in physical strength. With all these limitations, we may still hope, by a cursory glance at names which have marked epochs in philosophy and literature, to arrive at some idea of the influence of life devoted to thought rather than to action; and also to prove, by positive instances, that there is nothing in the most intense application which must *necessarily* tend to shorten life, seeing that many of the most laborious men have been octo- and nono-genarians, and even centenarians.

M. Tissot states that Gorgias, the rhetorician, lived to the age of one hundred and eight years, "without discontinuing his studies, and without any infirmity." Isocrates wrote his "*Pan-Athenæai*" when he was ninety-four, and lived to ninety-eight. The above writer also mentions the case of "one of the greatest physicians in Europe, who, although he had studied very hard all his lifetime, and is now almost seventy, wrote me word not long since that he still studied generally fourteen hours every day, and yet enjoyed the most perfect health."

Epimenides, the seventh of the "wise men," lived, it is supposed, to the age of one hundred and fifty-four. Herodicus, a very distinguished physician and philosopher, the master of Hippocrates,

* "It may be truly said, without any hyperbole, that every pursuit which ennobles the mind has a tendency to invigorate the body, and by its tranquillizing influence to add to the duration of life."—Madden's "*Infirmities of Genius*," vol. i. p. 112.

lived to the age of one hundred. Hippocrates himself, whose genuine writings alone would be sufficient to testify to a life of arduous study, lived to the age of ninety-nine. Galen wrote, it is said, three hundred volumes; what now remain of his works occupy, in the edition of 1538, five folio volumes. He lived to near one hundred years. Lewis Cornaro wrote seven or eight hours daily for a considerable period of his life, and lived to the age of one hundred, in spite of a feeble constitution originally.

Theophrastus wrote two hundred distinct treatises, and lived to the age of one hundred and seven. Zeno, the founder of the Stoic school, lived to the age of ninety-eight; and, in the full possession of his faculties, then committed suicide, having received, as he supposed, a warning by a wound of the thumb that it was time for him to depart. Democritus was so devoted to study and meditation that he put out his eyes, it is said, that external objects might not distract his attention. He died aged one hundred and nine years. Sophocles died aged ninety-one. Xenophon, Diogenes, and Carneades, each lived to the age of ninety. Varro wrote five hundred volumes, and lived to eighty-eight years. Euripides died aged eighty-five; Polybius, eighty-one; Juvenal, above eighty; Pythagoras, eighty; Quintilian, eighty. Chrysippus died of laughter, at eighty. The poet Pindar died aged eighty; Plato, aged eighty-one. Socrates, in the full possession of his faculties, was judicially murdered at seventy-one. Anaxagoras, to whom we have before alluded, died at seventy-two. Aristotle died at sixty-three. Thucydides was eighty.

It would be difficult to select twenty-five names which exerted a much greater influence upon literature, philosophy, and history, than these in old times. Many of them are known to have been most voluminous writers—many of them most profound thinkers. These were not the days of handbooks and vade-mecums; those who wanted information or mental cultivation had to work for it. Yet the average age of these twenty-five men is exactly ninety years. It is much to be questioned whether the united ages of twenty-five of the most distinguished farmers that the world has ever produced would amount to two thousand two hundred and fifty years. The list might easily be enlarged greatly by such men as Seneca and Pliny, who came to untimely death by accident or tyranny, and who promised to live as long as the oldest, in the course of nature.

We cannot refrain from quoting some remarks upon the labours of the old commentators, which appeared in an amusing paper in a contemporary journal,* before passing in review the ages of some of the most distinguished:—

* Chambers's Journal, Oct., 1857.

"Homer says that it would take nine men of his degenerate day to lift a stone thrown by a single warrior of the heroic ages. We know not how many men of our own time it would take to equal the labour of our commentator—certainly not less than a dozen. In truth, his were the heroic days of literature. See how the pile of manuscript grows under his indefatigable fingers! If he has sat at work less than sixteen hours in the twenty-four, he considers, like Titus, that he has lost a day. 'Fits!' says Bernard Lintot, in Pope's squib against Dennis—'a man may well have fits and swollen legs who sits writing fourteen hours a day.' Alas! the degenerate days had already set in; in the time of Bernard Lintot, our commentator sat writing for sixteen hours, for six months in succession, without having fits or swollen legs. There was a time when he only allowed himself one night's rest out of three. He was warm with youth in those days, and found that he had gone too far; there are stones too heavy even for Homeric heroes. No wonder that piles of folios grew out of his labours."

Yet these old writers, commentators and others, were apparently a hardy race—they were generally long-lived. Beza, the severity of whose enormous labours might be supposed to be aggravated as to the results by the acrimonious controversies in which he was engaged, lived in the perfect enjoyment of his faculties up to the age of eighty-six. The learned Richard Bentley died at eighty-one; Neander was seventy-eight; Scaliger, sixty-nine; Heyne, eighty-four; Parr, eighty; Pighius, eighty-four; Vossius, seventy-three; Hobbes, ninety-one, at death.

Mr. Madden, the able author of the "Infirmities of Genius," has constructed some most instructive tables relative to the longevity of men distinguished for their intellectual pursuits. He says that each list contains twenty names, in which "no other attention has been given to the selection than that which eminence suggested, without any regard to the ages of those who presented themselves to notice."

An analysis of the tables gives the following averages of life for the various classes:—

	Aggregate years.	Average.
Twenty natural philosophers	1504	75
Twenty moral philosophers	1417	70
Twenty sculptors and painters	1412	70
Twenty authors on law, &c.	1394	69
Twenty medical authors	1368	68
Twenty authors on revealed religion	1350	67
Twenty philologists	1323	66
Twenty musical composers	1284	64
Twenty novelists and miscellaneous authors	1257	62½
Twenty dramatists	1249	62
Twenty authors on natural religion	1245	62
Twenty poets	1144	57

This list does not by any means give too high an average of life for literary characters. Many of the oldest are omitted from the calculations, because, though equally laborious, their eminence was not quite so great; and, again, many are inserted, because eminent, who died young, obviously not from causes connected with mental application. This is particularly illustrated amongst the poets by the cases of Byron and Burns, whose deaths certainly were not justly to be attributed to the nature of their mental habits. Amongst artists, also, Fuseli (eighty-four), Nollekens (eighty-six), Kneller (seventy-five), and Albert Durer (eighty-seven), are not mentioned. M. Lordat, in his "Mental Dynamics," gives many remarkable instances of intellectual pursuits being carried on to an extremely advanced age—"for instance, M. des Quersonnières, one hundred and sixteen years of age, now residing in Paris, an accomplished poet, remarkable for his powers of conversation, and full of vivacity." He mentions also another poet, M. Leroy, aged one hundred years. Fontenelle, considered the most universal genius that Europe has produced, for forty-two years Secretary to the Academy of Sciences in Paris, lived with unimpaired faculties to the age of one hundred years. Father Sirmond, called by Naudé "an inexhaustible treasury of ecclesiastical lore," lived to the age of ninety-three. Hutton, the learned geologist and cosmogonist, died at ninety-two.

We will now give a table of distinguished men, with their ages, independent of classification or chronology—such names as are sufficiently known to the world to preclude the necessity of giving any account of their labours:—

	Age.		Age.
Bacon (Roger)	78	Hoffman	83
Buffon	81	Pinel	84
Copernicus	70	Claude	82
Galileo	78	Titian	96
Lowenhoeck	91	Franklin	85
Newton	84	Halley	86
Whiston	95	Herschel	84
Young	84	La Place	77
Ferguson (Adam)	92	Linnæus	72
Kant	80	Metastasio	84
Reid (T.)	86	Milton	66
Goethe	82	Bacon (Lord)	65
Crebillon	89	Hobbes	91
Goldoni	85	Locke	72
Bentham	85	Stewart (D.)	75
Mansfield	88	Voltaire	84
Le Sage	80	Cumberland	80
Wesley (John)	88	Southern (Thomas)	86

	Age.		Age.
Coke (Lord)	85	Rollin	80
Wilmot	83	Waller	82
Rabelais	70	Chalmers	83
Harvey	81	South (Dr.)	83
Heberden	92	Johnson (Dr.)	75
Michael Angelo	96	Cherubini	82
Handel	75	Fleury (Cardinal)	90
Haydn	77	Anquetil	84
Ruysch	93	Swift	78
Winslow	91	Watts (Dr.)	74
Morgagni	89	Watt (Jas.)	83
Cardan	76	Erasmus	69

This list is taken entirely at random, and might be almost indefinitely enlarged ; but we are warned to conclude.

There are certain practical deductions obviously to be drawn from the details and arguments that have been brought forward.

1. Devotion to intellectual pursuits and to studies, even of the most severe* and unremitting character, is not incompatible with extreme longevity, terminated by a serene and unclouded sunset. When Fontenelle's brilliant career terminated, and he was asked if he felt pain, he replied, "I only feel a difficulty of existing."

2. Mental application is a powerful remedy in diseases both of body and mind ; and its power as a remedy is proportionate to its intensity as a pursuit.

3. The emotions, especially those of a depressing kind, as anxiety, fear, &c., have a remarkable influence in giving a tone to, and intensifying the morbid effects of, excessive mental labour. Yet in some cases, as in those of Byron and Cowper, the best and only resource against despair is found in composition.

4. The turmoils of active life do not appear to render intellectual labour more injurious to the system ; possibly here also the influence may be counteracting. Milton, the Secretary to the Commonwealth, in times when men lived years in months—blind and in domestic discomfort, writing his immortal poems ; John Wesley, persecuted and almost an outcast from his former friends—in "labours more abundant"—denying himself natural rest and refreshment, yet acting with mind and body with unparalleled energy ; Voltaire, the apostle of infidelity, at war with more than the whole world ; Luther, hunted by principalities and powers like a wild beast—these and a cloud of others warred with the existing order of things, and remained masters of themselves and their mental powers to a ripe old age.

* Dr. Johnson composed his "Dictionary" in seven years ! And during that time he wrote also the Prologue to the opening of Drury Lane Theatre ; the "Vanity of Human Wishes ;" the tragedy of "Irene ;" and the "Rambler"—an almost incomprehensible effort of mind. He lived to the age of seventy-five.

5. The injurious effects of mental labour are in great measure owing—

- To excessive forcing in early youth ;
- To sudden or misdirected study ;
- To the co-operation of depressing emotions or passions ;
- To the neglect of the ordinary rules of hygiene ;
- To the neglect of the hints of the body ; or
- To the presence of the seeds of disease, degeneration, and decay in the system.

6. The man of healthy phlegmatic or choleric temperament is less likely to be injured by application than one of the sanguine or melancholic type ; yet these latter, with allowance for the original constitution, may be capable of vast efforts.

7. The extended and deep culture of the mind exerts a directly conservative influence upon the body.

Fellow-labourer ! one word to you before we conclude. Fear not to do manfully the work for which your gifts qualify you ; but do it as one who must give an account both of soul* and body. Work, and work hard, whilst it is day ; but the night cometh soon enough—do not hasten it. Use your faculties, use them to the utmost, but do not abuse them—make not the mortal do the work of the immortal. The body has its claims,—it is a good servant ; treat it well, and it will do your work ; it knows its own business ; do not attempt to teach or to force it ;

* That a mental endowment should retain its vigour, it is necessary that it be moderately exercised. If the exercise of the religious sentiments be interrupted, for example, by too exclusive an attention to science, communion with God will lose its relish. Claudius Buchanan, while at Cambridge, wrote to a friend as follows :—"I find this great attention to study has made me exceedingly languid in my devotional duties. I feel not that delight in reading the Bible, nor that pleasure in Divine things, which formerly animated me. On this account have many serious students in this University wholly abandoned the study of mathematics ; for it seems they generally feel the same effects that I do."—*Dr. Cheyne, on Partial Derangement of Mind in supposed connexion with Religion*, pp. 57—59.

It is a great mistake to suppose that men who have obtained great distinction and high honours at our two English Universities, do not in after life occupy the most eminent positions at the bar, on the bench, and in the Senate. First, as to OXFORD.—*Earl of Eldon*, English Prize Essay, 1771 ; Lord Tentarden, (Lord Chief Justice of the King's Bench,) English Essay, 1786, Latin verse, 1784 ; Sir W. E. Taunton, (Judge in Court of King's Bench,) English Essay, 1793 ; J. Phillimore, (Professor of Civil Law,) English Essay, 1798 ; Sir C. E. Gray, (Chief Justice of Bengal,) English Essay, 1808 ; Sir J. T. Coleridge, (Judge in Court of Queen's Bench,) English Essay, 1812, Latin verse, 1810, Latin Essay, 1812, 1st class Classics, 1812 ; Herman Marivale, (Professor of Political Economy,) English Essay, 1820, 1st class Classics, 1827 ; Roundell Palmer, (Deputy Steward of the University,) Latin Essay, 1835, Latin verse, 1831, English verse, 1832, 1st class Classics, 1834 ; Lord Colchester, Latin verse, 1777 ; Sir J. Richardson, (Judge in Common Pleas,) Latin verse, 1792 ; Sir Charles Puller, (Chief Justice at Calcutta,) Latin verse, 1794 ; G. K. Rickards, (Professor of Political Economy,) English verse, 1820, 2nd class Classics, 1823 ; Senior Nassault, (Professor of Political Economy,) 1st class Classics, 1811 ; Sir Richard Bethell, (Attorney-General, University Counsel,) 1st class on the Classics, 1818 ; Honourable J. C. Talbot, (Deputy High

attend to its wants and requirements, listen kindly and patiently to its hints, occasionally forestall its necessities by a little indulgence, and your consideration will be repaid with interest. But task it and pine it and suffocate it, make it a slave instead of a servant; it may not complain much, but, like the weary camel in the desert, it will lay it down and die.

Steward,) 1st double Classics, 1825; Travers Twiss, (Regius Professor of Civil Law,) 2nd double Classics, 1830.

CAMBRIDGE.—Sir F. Maseres, (Baron, Exchequer,) 4th Wrangler, 1752, Senior Medallist; Sir Elijah Impey, (Chief Justice, Fort William, Bengal,) 2nd Senior Optime, 1756, Junior Medallist; Sir J. Wilson, (Judge, Common Pleas,) Senior Wrangler, 1761; Lord Alvanley, (Chief Justice, Common Pleas,) 12th Wrangler, 1766; the late Lord Ellenborough, (Chief Justice, King's Bench,) 3rd Wrangler, 1771, Senior Medallist; Sir S. Lawrence, (Judge, Common Pleas,) 7th Wrangler, 1771; Sir H. Russell, (Judge in India,) 4th Senior Optime, 1772; the late Lord Manners, (Chancellor of Ireland,) 5th Wrangler, 1777; Chief Justice Warren, of Chester, 9th Wrangler, 1785; the late John Bell, Senior Wrangler, 1786, Senior Smith's Prizeman; Sir J. Littledale, (Judge in Court of Queen's Bench,) Senior Wrangler, 1787, Senior Smith's Prizeman; Lord Lyndhurst, (late Lord Chancellor,) 2nd Wrangler, 1794, Junior Smith's Prizeman; Sir John Beckett, (Judge Advocate,) 5th Wrangler, 1795; the late Sir John Williams, (Judge, Queen's Bench,) 18th Senior Optime, 1798; the late Sir N. C. Tindal, (Chief Justice, Common Pleas,) 8th Wrangler, 1799, Senior Medallist; the late Sir L. Shadwell, (Vice-Chancellor of England,) 7th Wrangler, 1800, Junior Medallist; Starkie, (Downing Professor of Law, University Counsel,) Senior Wrangler, 1803, Senior Smith's Prizeman; Lord Wensleydale, 5th Wrangler, 1803, Senior Medallist; the late Sir T. Coltman, (Judge, Common Pleas,) 13th Wrangler, 1803; Lord Chief Baron Pollock, Senior Wrangler, 1806, Senior Smith's Prizeman; Lord Langdale, Senior Wrangler, 1808, Senior Smith's Prizeman; the late Baron Alderson, Senior Wrangler, 1809, Senior Smith's Prizeman, 2nd Senior Medallist; Sir W. H. Maule, (Judge, Common Pleas,) Senior Wrangler, 1810, Senior Smith's Prizeman; Baron Platt, (Exchequer,) 5th Junior Optime, 1810; Chambers, (Judge of Supreme Court, Bombay,) 5th Wrangler, 1811; Lord Cranworth, 17th Wrangler, 1812; Mirehouse, (Author of Law of Tithes, and Common Serjeant of City of London,) 13th Senior Optime, 1812; Sir J. Romilly, (Downing Professor of Law, and Professor of Law, University College, London,) 4th Wrangler, 1813; Vice-Chancellor Kindersley, 4th Wrangler, 1814; Sir R. H. Malkin, (Chief Justice of Prince of Wales's Island,) 3rd Wrangler, 1818; Lord Justice Turner, 9th Wrangler, 1819; the late R. C. Hildyard, (Queen's Counsel,) 12th Senior Optime, 1823; Mr. John Cowling, Q.C., M.P., (University Counsel, and Deputy High Steward,) Senior Wrangler, 1824, Senior Smith's Prizeman; Vice-Chancellor Wood, 24th Wrangler, 1824; Vice-Chancellor Parker, 7th Wrangler, 1825; Mr. Loftus T. Wigram, Q.C., (M.P. for University,) 8th Wrangler, 1825; Chief Justice Martin, (New Zealand,) 26th Wrangler, 1829, 3rd in 1st class Classics, and Junior Medallist.

DUBLIN.—1795, Sir T. Lefroy, (Chief Justice of Queen's Bench,) gold medal; 1800, Sir J. L. Foster, (Judge, Common Pleas, M.P. for University, 1807,) gold medal; 1802, P. C. Crampton, (Queen's Counsel, Judge, Queen's Bench,) gold medal; 1803, F. Blackburne, (Lord Chancellor of Ireland,) gold medal; 1811, R. H. Greene, (Baron of Exchequer,) gold medal; 1823, J. H. Monahan, (Chief Justice Common Pleas,) gold medal.

ART. II.—THE INDIAN REBELLION IN ITS MORAL AND PSYCHOLOGICAL ASPECTS.

THE operations of the mind and the play of the passions on an extensive scale, are among the most interesting topics of Psychology. They are uncommon, because it is but seldom that the routine of life is diverted from its accustomed channels, or broken up into fragments so as to eliminate its component elements, and reveal the essential spirit by which it is animated and impelled. For the most part, society proceeds in a placid, if not an artificial way; its temper, however restless or energetic, is subdued by a code of conventional laws; and the natural impetus by which it would be incited to action, were it to yield to its own instigations or caprice, is held in check by the pressure of surrounding circumstances, or the force of public opinion. Thus, the wayward youth is overruled by domestic discipline, and the populace of a large community is overawed by a rigid system of police. But on occasions of public or private disaster, the inward man breaks out and unconsciously betrays himself. Those propensities and that disposition which would, under ordinary affairs, have remained latent and unperceived, suddenly come into view and startle us by the novelty of their vice, on the one hand, or their virtue, on the other. It would seem that we do not know with whom we are associated, nor what we ourselves really are, till some change of fortune draws aside the veil and discloses the inmost workings of the soul, both in our own breasts and those of others. The psychologist has frequent opportunities of verifying the justice of this remark. Of the overthrow of the intellect, which it is his peculiar office to manage and relieve, individual cases of this description are continually presenting themselves to his notice. But they are individual, not social cases; private, rather than public; local, and not universal. The opportunities of observing the last kind, as in great political revolutions, or the disastrous retreat of vast armies before an overpowering foe, or during violent monetary panics, when attacks of insanity are no unusual consequences of horrors witnessed or losses sustained, are, happily, few and far between in the course of our lives. And yet, though their moral effects are too well known for more than a passing allusion to them, they do not comprise the whole of the question. There are, besides, the distinctive differences of personal character, of moral worth or obliquity, of intellectual strength and weakness, and of peculiarities, finally, of race, religion, education, and innate propensities. These discordant elements can be separately examined only on the occurrence of signal catastrophes; and their examination must needs be hasty and brief, because their

manifestation is nothing more than the transient ebullition of the moment. But transient and evanescent though they be, they are, nevertheless, both the absolute and substantial endowments of mankind, proper to the hour of peril and the day of calamity. They constitute the heroic, in the highest sense of the term; they test the metal we are made of; they cost the life and name of the actors; they ennoble or vilify a family, a class, or a clan; they make or unmake a nation! This is the study of psychology on the world's stage—the analysis of the human understanding in the living drama of races and creeds. Such is the theme that has engaged our attention while contemplating the Indian mutinies, of which we now proceed to present our readers with a narrative, comprising a comparative review of its salient incidents, historical bearings, and philosophic relations.

The European inhabitants had slumbered peaceably on the night of the 10th, and the large cantonments, garrisoned exclusively by native troops, were undisturbed on the morning of the 11th of May, when some cavalry troopers dashed across the bridge of boats on the Jumna, and entered the city of Delhi. They left half their number to hold the bridge, while the rest—not more than fifteen, it is said—galloping through the streets, created a riot as they passed along among the scum of the population,—faced the 54th Native Infantry, which was ordered down to resist them,—pistolled the Colonel and European officers, who were without their arms,—and in an incredibly short space of time took military possession of a fortress and arsenal the strongest and the best appointed in India, and obstinately continued to hold it till the 20th of September following. All the Christian population within its walls were massacred. A very few only escaped to tell the tale. The chief military officers fell; the banks, printing houses, and other non-military stations, were plundered, the inmates murdered, and a vast number of clerks, half-castes, inferior Europeans, and every real or nominal Christian, slaughtered on the spot. No massacre took place in the cantonments; in fact, the regiments left there seem to have stayed with their officers the greater part of the day, and only gradually or passively went over or refused to act. The officers and ladies were collected at one point, and long and anxiously did they expect the arrival of aid from Meerut. Mutineers in abundance arrived thence; but the day wore away, and no Europeans came. Some thoughtful mutineer—whether in mercy or in triumph, we know not—sent up a cart and deposited before the survivors the bodies of the officers killed in the city. Bitter, indeed, must have been the feelings of those who remained. In the evening, finding themselves deserted by their men, and without aid from Meerut, they determined to fly.

They had a number of carriages of different kinds, and they generally escaped in safety. But other stragglers from various other quarters of the place had more difficult and perilous escapes, wandering as fugitives from village to village; and some of them were thus wandering for several weeks before they reached their European relatives, and enduring all the time most cruel hardships of want and weather.*

Thus ended the day on which Delhi fell, and with its fall quickly followed that of every other military station in Upper Bengal—Benares, Allahabad, Agra, Lucknow in Oude, Cawnpore, and others. Regiment after regiment revolted, and, with different episodes of bloodshed and cruelty, passed over to the side of the rebels, and turned their arms against their employers, and the white population generally. The first shot was fired on the 10th of May, at Meerut, and by the 10th of June the whole of the North-west Provinces had become completely revolutionized; the British rule was confined to a very few insulated stations held by European troops; in the country generally it had ceased to exist. Entire anarchy had taken its place.† Dinapore and Arrah revolted at a later date. Some local insurrections broke out in the Bombay Presidency; and the Punjaub was prevented from following the same desperate course by nothing else than the decision of its energetic Commissioner and the presence of several European regiments. In all other quarters, the rebellion was complete; and by the beginning of July we had 100,000 well-disciplined troops of all arms—cavalry, infantry, and artillery—arrayed against us in the field, or in actual possession of the strongholds of Delhi and Cawnpore, if not of Lucknow, Agra, Benares, and Allahabad. Never was any military achievement so well planned, or so well achieved without a plan; never was a civilized Government so easily taken by surprise, or, if not surprised, so easily wrested of its strongest stations and richest provinces, against its will; its officials slain, its people tortured and killed, its highest and lowest military officers put to death or to flight, its houses and cities burnt to the ground, and its treasure plundered and carried off in triumph or contempt. The rebellion was a master-stroke; it had attained its first object by a dash, and in the short space of a month it had inflicted a wound on the name and character of the British power which it will take years to heal up, more than half a century to re-establish in its pristine strength, and, it may be, never to recover from entirely. At all events, it can never be forgotten by either side; suspicion must always re-

* *The Times*, October 24th, 1857. History of the Bengal Mutineers, from Umballah.

† *The Times*, October 26th.

main, and with suspicion come also distrust, retaliation, and revenge. As we stand by and look on, we are tempted to exclaim, *Alas!* that in one hour so great riches should have come to nought!

In the foregoing brief account, our minds are carried back to the ruthless period of Tamerlane, who once proposed to exterminate all the inhabitants of the Chinese Empire, and turn it into a sheep-walk. From this direful project he was hindered by death; but a similar process was his rule with the cities he conquered.* Let it be understood, he came down upon cities living in peace and prosperity, like those in India,† which had done him no harm, which had not resisted him, which submitted to him at discretion. He sacked the city, killed or enlisted the soldiery, and divided the rich, the women, and the artisans, among his followers. The Tartar character has been always the same, and in the Indian mutinies we see it exemplified to the very letter.

Our object in selecting this popular theme for our Journal, is on account of the very striking manner in which certain emotions of the mind have displayed themselves on so many trying occasions—chivalry, devotion, and fortitude, on the one hand; cowardice, treachery, and cruelty, on the other. And these noble or ignoble qualities have not been the transient outbursts of the moment, but, on the contrary, the inborn energies of the soul, which belong not to the individual, but to his race, and not merely to his race, but to the political, moral, and social institutions of which he is the living representative and agent. We are accustomed to delight ourselves with tales of romance, and the spirit-stirring scenes of the great drama of Shakspeare or Racine; but within the last few months fiction has been surpassed by truth, and tragedy fades into insignificance before the actual horrors endured by our countrymen, or resisted to the last by their own heroic bravery, or coolly narrated by their masterly pens in the midst of danger. Nor have our countrywomen fallen short of their high birth and destiny. Their courage has risen with the occasion, and shone the brighter, the darker grew the storm. They never quailed. They literally stood to their guns. They faced the shower of bullets—the glare of the naked tulwar. They loaded the muskets or pistols, and handed them to their husbands for their mutual defence, in the midst of the hottest fire; nay, more, when all was done that could be done

* Neither age, nor the severity of winter, could retard the impatience of Timour; he, mounted on horseback, passed the Sahan (Iaxartes) on the ice, marched 300 miles from his capital, and pitched his last camp at Otrar, where he was expected by the angel of death. Fatigue and the indiscreet use of iced water accelerated the progress of his fever, and the conqueror of Asia expired in the seventieth year of his age: his designs were lost, his armies were disbanded; China was saved.—*Gibbon*.

† Newman's "Tulka," p. 40.

by human strength and self-possession in the front of overwhelming forces, they gave up their lives rather than their honour, and devoted themselves to death instead of infamy. We see a noble Englishman and his wife defending a tower. The woman loads her husband's pistols: he fights the ruffianly legion till it swarms up the walls. Then the brave fellow, kissing his wife, slays her—which he does for her sake, but which a Rajpoot would have done for his own—and then he kills himself, and they die as the infernal pirates rush upon them. Instead of the anecdote of Chelonis and Clœlia, our children may in future learn, from the victims of Bengal, how nobly an Englishwoman may die—how Mrs. Skene fought by her husband's side, how Miss Jennings offered to sacrifice herself to save her father. And upon these countrywomen of ours—matrons, virgins, tender girls—and upon tender children, have been practised the vilest tortures; things to be remembered, not descanted upon; infamies which the Greeks would have called *The Unutterable*, failing to describe them.* Nor are the instances of high devotion only a few. At Futtyghur, the wife and child of Mr. Tucker being about to fall into the hands of another rebellious set, she called to her husband to shoot her at once. He did so, his child also, and then himself. A Major Robertson also shot his wife and children and himself, under similar circumstances.† This is a new and melancholy feature in the history of these tragedies.‡ But everything of the sort falls into the shade compared with the lofty and moral grandeur of the heroine of Cawnpore.§ A daughter of General Sir Hugh Wheeler's was taken off by a sowar, and put into his house along with his wife, near the church. This girl remained till nightfall, and when he came home drunk and fell asleep, she took a sword and cut off his head, his mother's head, the two children's heads, and his wife's, and then walked out into the night air; and when she saw other sowars she said, "Go inside and see how nicely I have rubbed the Resseldar's feet!" They went inside, and found them all dead. She then jumped into a well, and was killed. There is a stern brevity in the tale that strikes us with mixed admiration and awe; and in those few calm, biting words, "I have rubbed the Resseldar's feet," there is a horrible irony, expressive of the

* *The Leader*.

† Let us hear both sides of the question:—"I have given up walking about the back streets of Delhi, as yesterday an officer and myself had taken a party of twenty men out patrolling, and we found fourteen women with their throats cut from ear to ear by their own husbands, and laid out in their shawls. We caught a man there who said he saw them killed, and showed us their husbands, who had done the best thing they could afterwards, and killed themselves."—*Extract of a letter from Delhi after the storming of it*:—*The Times*, November 19th, 1857. So that what is heroic on our side is dastardly on theirs.

‡ Letter from Jubbulpore, August 5th.

§ *The Times*, October 16th, 1857.

frenzy of passion at its highest pitch of exaltation. Those who listened to these words, and saw what this girl had done, were seized with fear, and none of the rebels would have anything to say to the English women, whom the Nana at first proposed to give over to the soldiery. It was Medea again, but without her magic; Judith and Holofernes, in the midst of drunken carnage; Virginius and his daughter, in the Roman Forum; Tarquin and Lucretia. But no, it was none of these, for they all fail in the comparison, and that tender girl stands alone in her self-devotion—THE BRITISH SOLDIER'S HIGH-MINDED DAUGHTER. Alas! alas!—so young, so fair, so pure—to have died so early—to have perished thus! In the history of India, her name will descend to the latest posterity. A hundred and fifteen women and children were imprisoned with scarcely any food for six days, except gram and such stuff. The Nana ordered them to be killed. When they learnt this, the ladies tore their clothes, and with the shreds fastened the door. A sowar jumped over the wall, and began the slaughter; other sowars came through the doors, and all the prisoners were killed. Their bodies were cast into the well. Twenty-five women and children remained alive under the heap of dead bodies—the women were killed, and the children dashed against the ground. The floor of the apartment was clotted with gore. Portions of dresses, collars, and children's socks, and ladies' round hats, lay about saturated with blood; and in the sword cuts on the wooden pillars of the room, long and dark hair was carried by the edges of the weapons, and there hung their tresses. "I often wish," says a writer who visited this room upon the recapture of Cawnpore by General Havelock, shortly afterwards—"I often wish I had never been there. Their limbs may be seen sticking out of the mass of gory confusion down the well into which they were thrown. I picked up a mutilated prayer-book. It had lost the cover, but on the fly-leaf is written, 'For dearest mamma, from her affectionate Tom, June, 1845.' The Litany, at page 38, is sprinkled with blood!" Some portions of a diary written in pencil were found, and it broke off at the day of the massacre, or just before; and a small work-box was open, and the things scattered about in the midst of the blood. General Neill compelled the high-caste Sepoys, whom he caught, to wash up the blood, and afterwards hung them, by both of which acts they defiled themselves and lost their caste; and the 78th Highlanders, on their arrival at Cawnpore, extricated General Wheeler's daughter from among the mangled remains, gently removed the ringlets from her head, separated a portion of them for her friends at home, and divided the remainder equally among themselves, each man swearing, as he received his share, that for

every hair he had received a Hindoo should die by his hand. Well might Lord Palmerston exclaim, on the 9th of November, at Guildhall, "Henceforth the bravest soldier may think it no disparagement to be told that his courage and his power of endurance are equal to those of an Englishwoman!"

The atrocities of the Nana Sahib at Cawnpore are, however, only in keeping with his creed and race. At the capture of Sivasa by Timour, in 1389, four thousand Christian warriors were buried alive by his orders. Their heads were tied down by cords lashed tightly round the neck and under the thighs, so as to bring the face out between the legs. In this agonizing posture they were thrown into graves, purposely left open for a time to prolong their misery.* After the battle of Nicopolis, Bajazet sat on a lofty throne to see the execution of three hundred Christian gentlemen, pitilessly murdered before his eyes. The meaner captives were sold for slaves, and the women, who had followed the French camp, were abandoned to the brutality of the Turkish soldiers.† The Sultan Musa, in 1424, caused the carcasses of three Servian garrisons to be arranged as tables, and a feast spread upon them, at which he entertained the generals and chief captains of the Ottoman army; and in the memory of many of us, on the insurrection of the Greeks in Scio, their barbarian masters carried fire and sword throughout that flourishing island till it was left a desert, hurrying away women and boys to an infamous captivity, and murdering youths and grown men, till out of 120,000 souls in the spring time, not 900 were left there when the crops were ripe for the sickle.‡ In the present year the same scenes have been repeated in India, and the daily journals are teeming with their horrid particulars. We see a young girl, naked, mounted upon a cart, paraded through the streets of a city, subjected to the last humiliations, and torn limb from limb by gangs of black satyrs.§ Give full stretch to your imagination, says a writer who had witnessed what he describes, —think of everything that is cruel, inhuman, infernal, and you cannot then conceive anything so diabolical as what these demons in human form have perpetrated. A man who witnessed the last massacre at Delhi gives a horrid account of it, stating that little children were thrown up in the air, and caught on the points of bayonets, or cut at as they fell with tulwars. One lady was stripped, abused, and murdered in the most cruel manner, first cutting off her breasts. Another lady, who had hid herself under a bridge, was treated in the same manner, then hacked to pieces and her mangled remains thrown out on the plain. We found

* Creasy's "Ottoman Turks," vol. i. p. 74.

† Ibid., pp. 60—84; on the authority of Froissart.

‡ Newman's "Turks," p. 136.

§ The *Leader*.

a pair of boots, evidently those of a little child, with the feet in them. They had been cut off just above the ankles. Children were put to death and cut to pieces before their parents, who were lashed to a post or tree; and pregnant women were violated and ripped open before their husbands' faces, or flayed alive, or roasted over a fire, or slowly lacerated till they died. There is no end of their horrible ingenuity in torturing their victims. Bungalows were burnt to the ground—costly furniture broken and despoiled—silver services, money, and jewels stolen or strewed about. There was nothing but fire and blood, ruin, and desolation, and woe.

We might suppose that a new era had commenced in the history of the world, so regular and peaceful has been the course of the last quarter of a century. But peace and prosperity are not the rule of life. The historian knows but too well that his page recounts a wearisome catalogue of contest and misery from the first centuries to the last. Scarcely a hundred years have elapsed since the first French Revolution, whose enormities staggered the world; not fifty since the spoliation of Poland by Russia. At the close of the last century, to select one instance out of many, when the Russians took Oczakoff, in 1788, the same scenes were enacted. The Turks of Oczakoff had, before the siege, surprised a Russian village in the vicinity, and mercilessly slaughtered all the inhabitants. Potemkin and Suwarrow* caused the Russian regiments that were to assault the town to be first led through the village as it lay in ashes, and with its streets still red with the blood of their fellow-countrymen. With their natural, stubborn, savage courage, thus inflamed by the longing for revenge, the Russians advanced over the frozen Liman against the least fortified side of the city. Whole ranks were swept away by the fire of the besieged; but the supporting columns still came forward unflinchingly, through musketry and grape; four thousand Russians fell, but the survivors bore down all resistance, and forced their way into the city, where for three days they revelled in murder and pillage. No mercy was shown to age or sex; and out of a population and garrison of forty thousand human beings, only a few hundreds (chiefly women and children) escaped, whom the exertions of the officers in the Russian service rescued from the indiscriminate fury of the soldiery.

Mr. Eton, who was with Prince Potemkin at Oczakoff, describes a touching scene which he witnessed there, and which he

* Suwarrow was the general to whom Prince Potemkin gave the laconic order,—“You will take Ismail.” Suwarrow took it, but at a cost of carnage and crime unparalleled in the records of ancient or modern warfare. After his victories—for he was never defeated—Suwarrow used to retire to his tent and cry like a child.

cites as a proof of the fortitude and resignation, bordering on apathy, with which the Turks bear evils of the greatest magnitude. He says:—"The Turkish women and children (in number about four hundred) who were brought out of Oczakoff, when the city was taken, to the head-quarters of the Russian army, were put all together the first night under a tent, as no better accommodation could, under the pressure of circumstances, be made for them, though it froze exceedingly hard, and they suffered dreadfully from cold and nakedness, and many from wounds. As I spoke Turkish, I had the guard of that part, and the superintendence of them for that night. I observed that there reigned a perfect silence among them; not one woman weeping or lamenting, at least loudly, though every one, perhaps, had lost a parent, a child, or a husband. They spoke with a calm and firm voice, and answered the questions I put to them apparently without agitation. I was astonished, and knew not whether to impute it to insensibility, or the habit of seeing and hearing of great vicissitudes of fortune, or to a patience and resignation inculcated by their religion; and to this day I am equally unable to account for it. One woman sat in a silent and remarkably melancholy posture, insomuch that I was induced to offer her some consolation. I asked her why she did not take courage, and bear misfortune like a Mussulman, as her companions did. She answered in these striking words:—'*I have seen my father, my husband, and my children killed; I have only one child left!*' 'Where is it?' I asked her with some precipitation. '*Here!*' she calmly said, and pointed to a child by her side, which had just expired. I and those with me burst into tears, but she did not weep at all. I took with me that night into my warm subterranean room as many of those miserable women and children, wounded and perishing with cold, as it would contain; they stayed with me twelve days, during all which time none of them either complained aloud, or showed any signs of excessive internal grief, but each told me her story (both young and old) as of an indifferent person, without exclamation, without sighs, without tears."*

The Russians are Mongol Tartars, and the Turks are originally the Tartar descendants of the White Huns of Sogdiana, or Bokhara; and cruelty is proper to them both. But in the sad tale just told by Mr. Eton, we see the kind-hearted Saxon, full of warmth and compassion; while the sublime apathy of the Turkish women stands out in fine contrast to the animation, courage, and tenderness of the English women under similar circumstances.

The Anglo-Saxon spirit again comes into view in the following incident, related, in a letter from India, by a soldier of the 78th

* Creasy's "Ottoman Turks," vol. ii. p. 291.

Highlanders to a relative in Perth:—"We came to a village and set it on fire—I saw nothing but flames around me. I came across a woman about twenty-two years of age, sitting over a man that, to all appearances, would not see the day out. She was wetting his lips with *sisté*. The fire was coming fast, and the houses all around were in flames. Not far from this I saw four women. I ran up to them and asked them to come and help the sick man and woman out, but they thought they had enough to do, and so they had, poor things; but to save the woman and dying man, I drew my bayonet, and told them if they did not, I would kill them. They came, carried them out, and laid them under a tree. I left them. The flames were in the clouds. I went to the other side of the village, and there were about one hundred and forty women and about sixty children all crying and lamenting at what had been done. The old woman of that small family that I had previously taken out, came, and I thought she would have kissed the ground I stood upon. I offered them some biscuits from my rations," &c. &c.*

In reflecting on the causes of so great a calamity as that of the loss of one-third of an empire in so short a space of time, we are naturally led to inquire what was the state of the public mind, as well as that of the Government, both political and military, at the moment of the outbreak. Could it have been prevented? Was it unforeseen? Did it happen without warning? The matter seems to have had the anxious care of the Government; but the Commander-in-Chief took it more easily, and was out shooting, far from the telegraph. He was at Umballah in March, and thence went to the hills, to Simla. It was known that there had been a disturbance at Barrackpore and Berhampore, and afterwards at Umballah; and night after night isolated fires occurred, as early as April. All were equally puzzled and confounded by what they saw and heard. People gossiped or laughed; and the Commander-in-Chief was distracted by the most opposite opinions. In short, nothing was done; and Delhi was in the possession of the mutineers before any one was aware of it. There is no doubt that if a European force, however weak, had been marched into Delhi at the first intimation of alarm, that that fortress at least might have been preserved. The officers in command at Umballah were Queen's officers; there were also some dragoons and a battalion of infantry at Meerut. Had only the wing of a regiment been opposite the magazine—had only a few dragoons been on guard at the bridge of boats on the fatal morning of the 11th of May, the revolt might have been averted, if not suppressed. But the chief military oversight was at Meerut. At that station

* *The Times*, October 24, 1857—"History of the Indian Mutinies." This clever *résumé* occupies several columns in two impressions of the paper.

the European forces were stronger than at any in India ; but the regiments of European cavalry and rifles and large artillery were rendered inefficient by the general in command. Even in cantonments there was no effective opposition made to the first beginnings of the revolt ; the mutineers were allowed to depart unmolested ; and the active pursuit that might and ought to have been followed up to the Water-gate at Delhi, was omitted ; the lucky moment was lost, and with it was also lost the whole of the north-west provinces of Bengal, Lucknow, and the newly-annexed kingdom of Oude.*

A panic, likewise, was prevailing at the time, and it certainly tended to render all arrangements more difficult. You could believe no one. People seemed to have lost the use of their senses ; and those whom you would have implicitly believed at any other time, now told the most wonderfully unfounded stories. In short, there was no end of *canards*. It was impossible to distinguish truth from falsehood—a palpable sign of moral and intellectual debility commonly observed on most occasions of alarm and danger, whether social or individual. And there was no superior mind, cool and collected, in a position of authority equal to the emergency. The same want of foresight and precaution would have lost London on the 10th of April, 1848, as it had already lost the throne of Louis Philippe at Paris in the preceding February.†

One, and only one, solitary instance of determination and tact occurred at Delhi at that critical moment.‡ The Subahdar of the guard on duty at the magazine informed Lieutenant Willoughby and me that the King of Delhi had sent down word to the mutineers that he would, without delay, send scaling-ladders from the palace for the purpose of scaling the walls, and which shortly after arrived. On the ladders being placed against the wall, the whole of our native infantry deserted by climbing up the sloped sheds on the inside of the magazine, and descending the ladders on the outside, after which the enemy appeared in great numbers on the top of the walls, and on whom we kept up an incessant fire of grape, every round of which told well, as long as a single round remained. Previous

* *The Times*, October 24th, 1857, p. 8, sixth column.

† There are two sides to every question. "Let us for a moment suppose that the mutiny had at its first outbreak been quelled, subsequent events and disclosures have only proved to us that the outbreak was premature, and that had it been overcome at the time, it would probably have come upon us at the appointed day with a force that none of us could have hoped to withstand."—*Letter from an Engineer Officer, September 28: The Times*, November 24, 1857. Because the outbreak was premature, it was no reason for not resisting it at the first. The first blow might have been decisive. *Obsta in principis*, is a universal axiom.

‡ Official account, by Lieutenant G. Forrest, of the Ordnance department.

to the natives deserting us, they hid the priming pouches; and one man in particular, Kurreemburkh, a durwam, appeared to keep up a constant communication with the enemy on the outside, and keep them informed of our situation. Lieutenant Willoughby was so annoyed at this man's conduct that he gave me an order to shoot him should he again approach the gate.

Lieutenant Raynor, with the other Europeans, did everything that possibly could be done for the defence of the magazine. Conductor Buckley, assisted only by myself, loaded and fired the several guns in rapid succession, firing at least four rounds from each gun, and with the same steadiness as if standing on parade, although the enemy were then some hundreds in number, and kept up a continual fire of musketry on us within forty or fifty yards. After firing the last round, Conductor Buckley received a musket-ball in his arm, above the elbow. I at the same time was struck in the left hand by two musket-balls, which disabled me. Lieutenant Willoughby gave the order for firing the magazine, which was at once responded to by Conductor Scully firing the several trains. The convulsion took place; and such as escaped from beneath the ruins—and none escaped unhurt—retreated through the sally-port on the river face. Lieutenant Willoughby and I succeeded in reaching the Cashmere-gate. What became of the other parties it is impossible for me to say.*

This spirited scene has had its counterpart on many other previous occasions in the art of war. Presence of mind in the midst of danger is the chief attribute of an officer in command. It is that which places him above the crowd, and makes him a distinguished man. It sheds a lustre round his name, and emblazons his deeds in the annals of fame. Three hundred years ago, a solitary tower resisted the Turkish batteries, after all the exterior defences had been destroyed.† The name of the place was Szigarette; the date, 1520; the commandant's name, Zriny; his force reduced to not more than six hundred men. The Janissaries advanced to the assault along the bridge

* Died, on the 10th of May last, of his wounds, in the 28th year of his age, Lieutenant George Dobson Willoughby, Bengal Artillery, and Commissary of Ordnance at Delhi, eldest son of the late George Thomas Railton Willoughby, Esq., of Bath, and grandson of the late Dobson Willoughby, Esq., of Belsize, Hampstead. It is supposed (for there is no authentic account) that after his gallant devotion in the defence and destruction of the magazine at Delhi (on the morning of the 10th of May last), although so desperately wounded and scorched as to be hardly recognised, he endeavoured to make his escape to Meerut (with three or four other officers, who had joined him on his way), but, exhausted by his wounds, he fell an easy victim to some miscreants of a village, who murdered him in his resisting their attempt to plunder him, and whilst defending one of his companions.—*The Times*, November 25th, 1857.

† Creasy's "Ottoman Turks," vol. i., p. 312.

that led to the last shelter of the defenders. Zriny felt that his hour was come. He attired himself as if for a festival ; a diamond clasped his plume to his helmet ; his falchion, with the keys of the fortress and a purse full of choice ducats, hung from his glittering baldrick. "He who lays me out," he exclaimed, "shall be paid for his trouble ; the keys I surrender only with my life !" The banner of the Empire was borne before him. He descended to the outer court. The Turks were at the gate. A mortar, heavily loaded with missiles, was brought to bear upon the entrance. As the foremost Janissary raised his axe to break in the door, the gates were flung open, and Zriny himself fired the mortar. The deadly shower poured through the assailants ; and amidst the smoke, din, and confusion of this unexpected carnage, Zriny sprang forward sword in hand, followed by his devoted few. Six hundred Magyar sabres drank deeply of Turkish blood on that fatal day. Zriny, fighting to the last, fell pierced with two musket-balls through his body, and an arrow-wound in his head. The Ottomans, with a shout of "Allah" at his fall, pressed into the citadel, fired the place, and began the plunder. The fire caught a train, purposely laid by Zriny from the entrance to the magazine, which instantly exploded, and destroyed three thousand of the destroyers along with the battlements and walls of the fortress. Solyman the Magnificent, who had set himself down before Szigrette in full expectation of success, had died during the siege. He lay stark and cold in his tent, while the trumpets flourished aloud the note of victory, and the flag of earthly pageantry waved in vain above his senseless corpse. The world and its glories had closed above the career of one who had shaken the powers of Christendom to their centre, and who had owned the obedience of all the most celebrated cities of biblical and classical history, except Rome, Syracuse, and Persepolis. The Tigris, the Tanais, the Borysthenes, the Danube, the Hebrus, and the Ilyssus, had rolled their waters within the shadow of the Horse-tails. But a change had passed across the spirit of the dream ; the pomp was over, and both Zriny and Solyman were numbered with the dead.*

The morning broke clear and bright over the plains of Hindostan, the day after the first thrilling atrocities at Delhi, and

* The fall of Szigrette suggested to the mighty Byron the idea of his highly animated poem, "The Siege of Corinth :"—

" 'Tis fir'd !
 Spire, vaults, the shrine, the spoil, the slain,
 The turban'd victors, and the Christian band ;
 All that of living or dead remain,
 Hurl'd on high with her shiver'd fane,
 In one wild roar expir'd !"

the city of the Moguls outwardly appeared as serene as it had done the day before. Nothing betokened the change that had occurred within its walls ; and none, save a few wandering and dispirited outcasts, guessed the heavy blow that had been struck at our Anglo-Indian empire, the name and *prestige* of England. "We started from Delhi," says one writer, "with five ladies and four officers besides myself ; but afterwards in our wanderings fell in with two sergeants' wives and two little children, with two more officers and a merchant ; so altogether, on coming into Meerut, we were about seventeen souls. Oh, great Heaven ! to think of the privations we endured, and the narrow escapes we had ! We used to ford streams at night, and then walk on slowly in our dripping clothes, lying down to rest every half-hour ; for some of the ladies were wounded, and all so fatigued and worn out they could scarcely move. Had we been by ourselves, we should have made a dash for Meerut at once ; but having these unfortunate women with us, what could we do ? Sometimes we heard the villagers combining to murder us, and the whole time were in dread of being pursued and killed by the mutineers from Delhi. At one time we were attacked by the villagers, and robbed of everything we possessed : had we not had the ladies with us, we would have fought for it, and sold our lives dearly, instead of quietly giving up our arms as we did ; for we had a few blunt swords among us, with one double-barrelled gun." A lady, writing of her husband, says—"He found it was all over with him, and so he rode off, and got into a jungle, where he stayed a great part of the day. A groom, who had got his mare at a village, tried to betray him ; so he rode off again. Only fancy how dreadful it was for him, wandering about in the heat of the day, not knowing where to go, and begging for a little water, or drinking it out of the little streams, he was so thirsty." "As we were getting into the boats," writes a third, "we saw the Sepoys plundering the Treasury. On reaching a place about three miles below Fyzabad, we met some mutineers. There were 800 or 900 of them. About 100 of them fired on us when we were 100 yards off. We pushed off to the opposite bank of the Ganges, and got on an island among some jhow fields. The mutineers got into dingies and followed us. There were about thirty or forty yards of water between us. The major was drowned." A fourth writer states :—"There was a small deep river behind the house, and beyond the river a jungle of cypress and brushwood. Some escaped by the ford. I came up with a lady struggling to get on with her little child in her arms—a girl two and a half years old—and her husband with her, carrying a boy about six months old. I took the child from her arms, and with the aid of a quarter-master-sergeant, got it safe and sound, all three escaping un-

scathed through the fearful shower of bullets sent after us as we crossed the river and hid ourselves in the friendly jungle. The father and mother, with the baby, were killed."

"The Nana Sahib declared, 'We never deceive ; if we do, God will judge.' The General said, 'If you intend to deceive me, kill me at once ; I have no arms.' The Nana replied, 'I will not deceive you ; rely on us. I will supply you with food, &c., and convey you to Allahabad.' On this the General went inside the entrenchment, and consulted with the soldiers. They said, 'There's no reliance to be placed on natives—they will deceive you ;' a few said, 'Trust them ; it is better to do so.' On this the General returned, and said, 'I agree to your terms. See us away as far as Futtehpoore ; thence we can get easily to Allahabad.' The reply was, 'No, sir ; I will see you all safe to Allahabad.' On this, twenty boats were ordered with covers to them. When the Nana saw all was settled, he said, 'Don't let the treasure be taken ; send that to me.' The General said, 'You may have the money ;' there were three lacs in cash at this time. The Nana said, 'You breakfast on board the boats at ten A.M. to-morrow, and dine on board, and leave the entrenchment clear by eleven A.M.' The General assented to this. They were all ready, when a message from the Nana came, saying, 'The boats will not be ready to-day ; you must leave to-morrow ; leave in the evening.' The General said, 'I wont leave at night, as you may play us false.' The Nana said, 'Very well ; leave at four P.M.' On the following day, the Nana took away all the treasure. At this time the delay again took place in their departure ; all the ladies and children were dressed and ready. The General asked the Nana, 'Are all our servants to go with us, or do you supply us with servants ?' The reply was, 'Yes.' On the following day, though suspicions were entertained of the faith of the Nana's party, still they hoped all was right. The Nana sent on Sunday to say the servants were not to go, as the ladies and women could look after themselves. On this being heard, they were all alarmed. At seven A.M. the mutineers surrounded the entrenchment, and all the Englishmen in their power ; the servants ran away and were cut down ; a few escaped ; all were alarmed. The rebels reached (?) the entrenchments, and said, 'Come to the boats ; all is ready.' Ladies and children were sent on elephants, dhoolies, &c., and the men marched to the river, and then embarked on the boats. When they all saw food prepared and all comfortable, they were delighted. When a few had gone on board, and others were waiting to embark on the river-side, a gun opened on them with canister (this gun and others had been masked) ; one boat took fire, and then another gun opened, and four boats were fired ; on this, those who escaped

the fire jumped into the water. The Sepoys also fired muskets; the Sowars entered the water on horseback, and cut numbers down. Fifteen boatloads of English were massacred; one hundred and eight women and children escaped this massacre, but many of them were wounded. The Nana said, 'Don't kill these; put them in prison.' The boat containing General Wheeler and other ladies and gentlemen got off for twenty-two miles, when they were seized by the Zemindars of Joagnuhar, and had their hands tied behind them, and were taken back to the Nana. Mrs. Read, Thomas Greenway, Mrs. Kirkpatrick, Mrs. M'Kenzie, and Captain M'Kenzie, and Dr. Harris, and several Europeans, were among the party. The Nana was much pleased. Owing to the General's old age, he said, 'Loosen his arms.' Hoolar Sing, kotwal of Cawnpore, said, 'Don't do so.' The Nana said, 'Take them to the guard, and let the others remain where they are.' One Sepoy and Sowar killed each an European. Dr. Harris was wounded with two balls, and then addressed the rebels—'Shoot me, or kill me; my countrymen will revenge my death before long.' Two Sowars then cut him down, and he died."—*The Times*, October 16, 1857.

The treachery at Cawnpore is an instance of the Mohammedan character towards friend and foe. After Selim the Terrible had entered Cairo, in 1517, without opposition, and the garrison which he placed in it had been slain to a man by the indomitable Touman Bey, he endeavoured to retake it with some of his best troops. A street fight ensued, but the Mamelukes retained possession of the place. Selim then proclaimed an amnesty to such of the Mamelukes as would surrender. On the faith of this promise, eight hundred of the chief Mamelukes surrendered themselves, or were given up by the citizens. Selim had them all beheaded, and then ordered a general massacre of all the inhabitants of Cairo. 50,000 human beings are said to have perished in this atrocious butchery. One of the titles of the Sultans is that of the "Man-slayer," to this day. It is a canon law of their policy to destroy their nearest kin on mounting the throne—a prerogative they have exercised to the full without scruple or reserve. Amurath IV. is reckoned to have put to death 100,000 human beings in his short reign, from 1623 to 1640. He once ordered a party of dancing women to be seized and drowned; and at another time he ordered the batteries to open on a boat full of females passing along the Bosphorus, too near to the walls of the seraglio. It was his favourite maxim, that "vengeance grows grey, but not decrepit." Von Hammer gives a long list of the confidential officers put to death by Solymán the Great; and it is even stated by Turkish historians, that he inveigled his own son into the royal pavilion

on purpose to have him bowstrung by surprise, and that, becoming impatient at the long-continued struggle between the Mutes and his victim, he himself also looked in on the horrible scene, and instigated them to the more speedy despatch of their work. A similar story is related of Selim I., who witnessed from an adjoining chamber the murder of his brothers, whom he had kidnapped for that purpose. The massacre of the Mamelukes at Cairo, in 1811, by Mehemet Ali, and that of the Janissaries at Constantinople, by Mahmoud II., in 1826, were both of them acts of the vilest treachery. So that the massacre at Cawnpore has nothing extraordinary in it, but is in strict keeping with the true spirit of the race.

Upwards of twelve centuries have elapsed since the contest between the Crescent and the Cross first began its mortal and obdurate strife. The years of the Hegira are fast running out; the last sands of its hour-glass are almost drained away; and yet the fatal four hundred years from the taking of Constantinople have already passed their close, and the Turkish and Christian prophecies respecting their awful accomplishment remain unfulfilled. The green flag of the Prophet waves above the Sublime Porte, and the illustrious line of the Osmanlis presides at Istamboul.* Severe as have been the Turkish reverses, both by land and sea, for the last two hundred and seventy years, and greatly as have been curtailed the frontiers of Turkey in Europe in the course of that long period, the Ottoman Princes nevertheless continue to hold the key of Europe in their hands, and to guard the passage of the Bosphorus with jealous pertinacity. The spirit of Islamism breathes in the desecrated sanctuary of St. Sophia, is proclaimed by the muezzin from the tops of their loftiest minarets and mosques, and is exhibited in the sanguinary and accursed tempers of the Mohammedan Sepoys or their miscreant chiefs, such as Nana Sahib. The hard struggle begun by Charles Martel, at Tours, in 732, and by Leo the Isaurian with his Greek fire, in 716, still goes on; and it has at length devolved on British valour to carry on the same deeds of arms in India at the present day, as those which once so effectually routed the Mohammedans before Vienna, in 1520; before the little fortress of Malta, so gallantly defended by La Vallete, in 1565; and before the fleets of Don John of Austria, at Lepanto, in 1571. In this light, the re-capture of Delhi, stained as it has

* "*Que diable faire de Constantinople ?*" said Joseph of Austria to Catherine of Russia, joking over their plot for the destruction of the Ottoman Empire, while at Batchiserai, or at the Gulf of Atkiar, the modern Sebastopol, in 1787. "What shall we do with those poor devils the Turks?" The royal joke is as good as ever; for Constantinople is seventy years older than it was then, and, in spite of so many Russian treaties to the contrary, the Turks are at this moment the faithful allies of the Western Powers.

been with the blood of heroes, among whom is the distinguished Nicholson, who fell in the assault, assumes a character of renown far beyond that of the contest itself, and commensurate only with the records of the Christian and civilized world. Other sieges may have been more famous for their strategy and skill, but none more important than this in a moral, a religious, and a political point of view. It is a crisis in the course of events—a turning-point in the order of affairs. Barbarism must not gain or hold the ascendant. The intelligence, the science, and the prowess of England, as well as of Europe, must not succumb—no, not for an hour—to the black races of mankind, the acknowledged ignorance, brutality, and inferiority of the Asiatic hordes.

“A portion of our troops had escalated the bastion walls close to the gate; others had scrambled up two large breaches in the walls and bastion near the Treasury. The remainder had entered at the gate itself, which had been blown open by one of our officers. The latter was really the hazardous duty of the day, and was most gallantly performed, though in broad daylight. The explosion party consisted of Lieutenants Home and Salkeld, of our corps, a few sappers, and a bugler of her Majesty’s 52nd. On their nearing the gate they found it slightly open, with a number of muskets protruding at the opening. They were received with a volley, which killed and wounded a number. Still, however, they advanced, and fixed their powder bags on to the gate. Sergeant Carmichael, of the Sappers, tried to light the portfire attached to the bags, but was shot dead in the attempt. After him Sergeant Burness, of the Sappers, tried, but fell, pierced with three bullets. After Sergeant Burness, Salkeld tried, but fell into the ditch, shot in the leg, which is broken, and in the arm, which has been amputated. Sergeant Smith, of the Sappers, tried next, and he and Home between them happily succeeded without a wound. Seeing the portfire well a-light, the whole party jumped into the ditch, and the enemy, little dreaming of what had been done, continued firing till the explosion took place, so you may fancy what effect it took. Twenty of the mutineers strewed the road inside the gate, not one of whom would it have been possible to recognise, and this was the first sight that met my eyes at the gate. Little wonder that Donald refused to move; however, finally, he did, and got as far as the centre of the main guard, beyond which nothing would urge him. It was perfect agony keeping my seat, and I would have given worlds to dismount—but walking was out of the question; it was anything but an agreeable fix to be in. I felt how perfectly useless I was, and being the only mounted man there in the open space, fully accounted for the number of bullets whistling past my ears. There was no help for it, so I had to make my

way back to camp as I best could, fully convinced of my own folly. You may imagine I had done neither leg nor ankle much good by the trip, and I had not many opportunities of seeing the remainder of the operations. We progressed slowly after this for two days; but having obtained possession of the magazine, containing about 130 guns, there could no longer be much doubt as to the result. The enemy, who had hitherto so stoutly resisted us, was losing heart, though he had succeeded in beating us back with loss and kept us at bay at two or three points. Daily and nightly large numbers continued to leave the city till the 20th, when we found ourselves in perfect possession, and the entire city evacuated. Immediately on receiving news of the evacuation, I started for the palace. You can have no conception of the scene of confusion—Riflemen, Goorkhas, Sikhs, and Punjabees quarrelling over their plunder, and such plunder to quarrel about! Old counterpanes, dirty blankets, tin and copper pots and pans, Sepoys' red coats, baskets, papers, packets of tinsel, bottles of rose water and otto of roses lying here, there, and everywhere, and the whole place in a state of squalor and wretchedness passing all description. On turning into the garden in front of Douglas's stables I found myself alone. I cannot tell you what a scene of desolation presented itself to my eyes. The garden had been an encamping ground of the Sepoys, and everything bore witness to its having been deserted in hot haste. The tents were still standing, but it seemed as if everybody had taken his armful out of the boxes, and, without caring for what might drop, had made the best of his way out of the place. The stillness, too, after the noise and riot that I had just quitted, was really appalling, and I stood at the foot of the stairs stupified as if with a heated atmosphere, and unable to move. I was roused by hearing three cheers from the apartments above me. . . . We have captured the King, his two sons and grandson—the three last (among whom was Mirza Mogul Bey) were most deservedly shot before they were brought into the city, where their bodies were exposed in the Chandney Chouk.*—*The Times*, Nov. 24, 1857.

* Another account:—"The gallantry with which the explosion party, under Lieutenants Home and Salkeld, performed the desperate duty of blowing up the Cashmere-gate, in broad daylight, will, I feel sure, be held to justify me in making special mention of it. The party was composed, in addition to the two officers named, of the following:—Sergeants John Smith and A. B. Carmichael, and Corporal Burgess, Sappers and Miners; Bugler Hawthorne, her Majesty's 52nd; 14 native Sappers and Miners, 10 Punjab ditto, musters covered by the fire of her Majesty's 60th Rifles. The party advanced at the double towards the Cashmere-gate. Lieutenant Home, with Sergeants Smith and Carmichael, and Havildar Mahor, all the Sappers leading and carrying the powder-bags, followed by Lieutenant Salkeld, Corporal Burgess, and a portion of the remainder of the party. The advanced party reached the gateway unhurt, and found that part of the drawbridge had been destroyed; but passing across the precarious footway supplied by the remaining beams, they proceeded to lodge their powder-bags against the gate. The

There can be no doubt as to the result. The personal feats of arms are the firstfruits of eventual success. One British soldier drives twenty Sepoys before him ; five hundred or five thousand bayonets, under the victorious Havelock, utterly rout and disperse as many tens of thousands of the enemy. Taught by ourselves, the Sepoys are only good soldiers so long as they repeat the lessons they have been taught. They have no power of themselves to do more than this. They are deficient in the first principles of action, by which much is accomplished by a few manœuvres, and everything is worked out upon a well-digested plan, altered and adapted on the spur of the moment to the change of circumstances, instantly discerned by the ready eye of genius, and thoroughly understood by the practised hand of science. We are witnessing, upon a vast arena, the demonstration of the great theorem that knowledge is power, and that personal and national ascendancy depend, not upon the amount of brute force, but upon the wisdom, fortitude, and justice of the people by whom they are displayed.

ART. III.—THE ASYLUMS OF ITALY, GERMANY, AND FRANCE.

NOTES OF A VISIT MADE IN THE YEAR 1865.

BY JOHN T. ARLIDGE, M.B., A.B. (LOND.),

Member of the Royal College of Physicians of London ; formerly Resident Medical Officer of St. Luke's Hospital, London.

(Continued from Vol. x. page 775.)

Venice possesses two public asylums—viz., one for males, occupying the small islet of St. Servilio, a short distance from the city ; and the other for females, situated at one extremity of the town, and forming a department of the large civil hospital.

wicket was open, and through it the enemy kept up a heavy fire upon them. Sergeant Carmichael was killed while laying his powder-bag, Havildar Mahor being at the same time wounded. The powder being laid, the advanced party slipped down into the ditch to allow the firing party, under Lieutenant Salkeld, to perform its duty. While endeavouring to fire the charge, Lieutenant Salkeld was shot through the arm and leg, and handed over the slow match to Corporal Burgess, who fell mortally wounded just as he had successfully accomplished the onerous duty. Havildar Tilluh Sing, of the Sikhs, was wounded, and Ramlohl, Sepoy of the same corps, was killed during this part of the operation. The demolition being most successful, Lieutenant Home, happily not wounded, caused the bugler to sound the regimental call of the 52nd, as the signal for the advancing columns. Fearing that amid the noise of the assault the sounds might not be heard, he had the call repeated three times, when the troops advanced and carried the gateway with complete success. I feel certain that a simple statement of this devoted and glorious deed will suffice to stamp it as one of the noblest on record in military history. The perfect success contributed most materially to the brilliant result of the day, and Lieutenants Home and Salkeld, with their gallant subordinate Europeans and natives, will, I doubt not, receive the rewards which valour before the enemy so distinguished as theirs has entitled them to."

The origin of both of these institutions for the insane is comparatively very recent. No State provision was made for the insane poor until 1802, when Ludovico Manin, the last Doge of Venice, gave by will a sum of 55,000 ducats for their maintenance, under the direction of the brethren (Padri Ospitalieri) of St. John the Divine (S. Giovanni di Dio), popularly known in Italy as the "Fate-bene-Fratelli." Prior, indeed, to that date—from the year 1737—a few patients belonging to the upper classes of citizens had been committed to the care of the brethren, at the expense of their families, and in 1797 had reached 30 in number. But the charge of such patients remained only subordinate to the general purpose of the institution as a military hospital; and it was not till after Manin's munificent bequest was received that the care and treatment of those mentally disordered became a primary object with the benevolent monks, and that an asylum for the insane of Venice rose into existence.

In 1822, the increasing number of lunatics in the monastic institution at St. Servilio induced the authorities to seek further accommodation elsewhere; when the ancient hospice of the mendicants connected with the great civil hospital of St. John and St. Paul, within the city, was selected, and, by various alterations and additions, fitted for their reception.

Soon after the institution of this second asylum, it was judged expedient to retain refractory and noisy cases at St. Servilio, and to transfer the quiet, convalescent, and the imbecile to the establishment in the city. As yet the monks had admitted both male and female patients under their care; however, in 1834, it was resolved to separate the sexes, and to locate the males in St. Servilio, and the females in the city asylum. This scheme was carried out in the following year, and is still adhered to. In each asylum two classes are received—viz., paupers and pensioners.

We shall commence with a description of the asylum for the female sex, of which we have, thanks to the kindness and courtesy of M. Pelt, the able chief physician, ample details both of its structure and management.

The Venetian asylum for female lunatics is situated at one extremity of Venice, bordered on the north side by the Lagoon; on the west, by the wide canal "de' Mendicanti;" on the south, by the General Hospital and the Chapel; and on the east, by a narrow street of adjoining houses. In position, therefore, it is much confined; and the only prospect from it is on the north side, extending over the Lagoon to the mainland and its distant mountain chain.

As before intimated, the building was originally destined for an asylum for aged and infirm mendicants, and has only of late years been converted to its present purpose. According to the

prevailing system of construction of Italian public institutions, it is so built as to enclose a square court, with a covered arcade running round it: and is of three stories. The basement is occupied by the offices of the physician; the visiting-room; the work-room; the refectory or dining-room; the "spinning" or weaving-room; a dormitory for epileptics, one for melancholic, and one for demented patients; by the bath-room, the kitchen of the infirmary, and store-rooms. On the first floor are—the large dormitory, partially subdivided into three rooms for maniacal patients; the dormitory for monomaniacs, the infirmary, and the apartments set apart for the class of pensioners, and reached by a distinct staircase. On the floor above are other dormitories—one for the reception and observation of new cases prior to their distribution, and another for the most refractory cases.

The central court-yard is the only available space for exercise, except a garden situated at some distance from the asylum, and therefore little available for general or frequent use. In the centre of the court is a fountain of good water. The court was paved, but not in a satisfactory state. The surrounding corridor, supported upon columns, had a pleasing appearance, and afforded a welcome shady walk in hot weather. It is beautifully paved with a sort of concrete, common in the country, composed of fragments of marble rolled and fixed into some kind of cement, which becomes very hard, and has a fine, smooth surface. The floor of this arcade is unfortunately—so far as concerns feeble patients—elevated between 1 foot and 18 inches above the level of the central court, and thus forms an awkward and dangerous step. The roof of the arcade constituted a promenade to the first floor—little available, however, to the inmates, from being too dangerous.

The work-room, which also serves at other times as an amusement-room, is of considerable, although of insufficient size for the number of patients daily resorting to it. It is bare of ornament, and dull from the height of the windows above the ground, and from their being closed by Venetian shutters, reaching two feet from the bottom. Adjoining it is the "spinning-room" (*Filanda*), so called because the patients are occupied in it at spinning-wheels and small looms, in preparing the flax, &c. The class so employed consists of those inexpert in needle-work, or who are unfit to mingle with the cleaner and more orderly inmates of the common work-room.

These rooms, as well as the dormitories, have the same sort of concrete floor as the arcade; but M. Pelt has, in some of them, had a wooden floor laid above it, as it was found to be cold and injurious to many weak patients. The rooms on the basement

are about 13 feet high, and are lighted with gas at night. The work-rooms have also a central stove, protected by a stout wooden railing. The walls are whitewashed and bare; the furniture consists of plain wooden tables (not fixed), chairs, and settees. The "spinning-room" is entered from the corridor by a very prison-like barred iron door, kept always locked: like the other rooms on this floor, it is elevated by two or three steps above the corridor, a constructional peculiarity open to many objections.

The baths are constructed of marble, and can be supplied with hot and cold, salt and fresh water. A douche-pipe is attached above each of them, and by screwing a rose on the end of it, a sort of shower-bath is obtainable.

In the small visiting-room, on the ground floor, was a piano for the use of the patients. This room conveniently communicated on one side with the large work-room.

The dormitories are intended only for night use; when patients require from any cause to keep their bed, they are transferred to the infirmary, a large and lofty apartment on the first floor, containing 28 beds, arranged along the walls on either side, having the usual concrete floor, and a large stove in its centre. The windows are placed some five feet above the floor—a very faulty arrangement, whether the ventilation or the cheerfulness of the apartment be considered. To each bed in this infirmary are allotted a "table de nuit," and a shelf for books.

The dormitories hold from 20 to 30 beds each, and contain no other furniture. A crucifix or a Madonna is commonly affixed against some part of the wall; and a gas-light, suspended from the centre of the room, serves to illuminate it at night. There is a special provision made to secure efficient ventilation, by the formation of apertures just above the floor, of about a foot square each, placed at considerable intervals, and communicating with the external air. These are closed on the inside by swinging doors or shutters, and externally by stout wire-work.

On this first floor was a room for seclusion, of about 14 feet by 15 feet, with a window placed high up, which could be closed by a shutter, when it was desirable to darken the room.

The more refractory patients sleep together in a dormitory on the second floor—the majority of them being under some sort of restraint during the night. A few indeed are retained in it during the day confined to their beds.

The portion of the asylum set apart for the pensioners (who are of two classes) consists of a common dining or day-room, of two dormitories, having six beds each for those of the second-class, and of four single rooms for first-class inmates, besides a chamber furnished with a restraint bed. Every first-class patient has her own attendant, who sleeps in the same apart-

ment with her. These single rooms, and likewise the general day-room, are comfortably furnished.

The bedsteads for the indigent patients are of very cheap construction, consisting of an iron framework with a headpiece, supported on a pair of iron trestles at the head and foot. The bedding consists of a paillasse stuffed with straw or shavings, of a flock bed, an upper and under sheet, a coloured woollen coverlet, and over this a printed and coloured cotton one. Some of the coverlets were quilted, to give them greater strength; the sheeting was also of coarser or finer material, according to the exigencies of the cases.

In northern Italy the bed and paillasse constitute, among the poor, the marriage portion of the bride, and are transmitted from generation to generation, the possession of several such heirlooms being a matter of pride. Hence it is common to see one or two beds or paillasses piled one on the other, giving the happy possessor an elevated resting-place, but one, by the way, from which it would be disagreeable to fall. This partiality for high beds persists in the asylums, and is indulged to a certain extent; some patients being allowed a very thick paillasse, or two of them, beneath the thick bed. The bedsteads themselves are actually low; yet by the quantity of bedding laid on them, the patient would appear raised to a dangerous height above the ground. However, I was assured that no accident had ever occurred from this custom; and we must conclude that, by habit, their movements asleep are so circumspect that they risk no fall from their high estate, but poise themselves securely, just as our German friends manage, by their much-to-be-admired quietude in bed, to balance and retain the light upper bed upon them, and nestle under its warmth, whilst our unskilled countrymen speedily part company with it, and tire in the attempt to ensconce themselves beneath it.

The luxury of a high bed, as may be supposed, is denied the epileptics; yet no specially constructed bedsteads are in use for them. Paralytics are occasionally furnished with feather, in place of the common wool-beds. Water-beds and water-cushions are unknown, and even air-cushions seem never to have been introduced into use in any of the Italian asylums. For dirty cases, a sort of trough or case is fitted into an iron framework, and filled with straw; over this a piece of stout linen or canvas is extended, upon which the patient is placed. The urine percolates through the straw, and is collected in a clumsy wooden tray beneath.

The laundry and the dispensary are common to the asylum and to the general hospital, of which the former is only a section. The laundry gives employment to a considerable

number of patients; but by its distance from their own section, and by its appertaining equally to the general hospital, they are to a certain and injurious extent removed from the special supervision and control required; an evil further augmented by their being under the direction of servants unconnected with the asylum. Another objection to the laundry was the employment there of two or three men, who mixed among the female patients.

Like those just named, the other domestic offices, such as the kitchen for the cooking of food, the clothing and victualling departments, were common both to the asylum and hospital, and under the jurisdiction of the officers of the latter.

The staircases are straight, but some of them open on one side, and are so far dangerous. The windows are everywhere protected; those on the ground-floor by bars externally, and by wire-work within; and those on the upper floors by the wirework alone.

Internal Organization and Treatment.—As the asylum forms a part of the Civil General Hospital, it is placed under the supreme control of the director-general of the whole establishment. Nothing can be undertaken, and no expenses incurred, without his assent; and he is supposed to supervise the entire management and internal economy of the institution. The appointment of chief physician and of the assistants to the asylum is vested in him. In the economical details he is assisted by the steward (administrator). The moral discipline and medical treatment are left to the chief physician, who is responsible for their due execution to the director-general, but not for the particular medical treatment he may adopt in any case. He is non-resident, and makes two visits daily—the principal one at 8 A.M. He has under him two assistants, or “internes,” who reside in the asylum, receive their board, and one of them a very small salary. They are appointed for two years, and, if recommended, may be re-appointed for two more; they are, however, not occupied throughout the whole period in the asylum, but from time to time act as “internes” in the general or other hospitals, according to the excellent system prevailing in France. They are required to attend the physician during his visits, to write out the tables of diet, to supervise the distribution of the medicines, to bleed and to perform other minor surgical as well as medical duties which may arise in the asylum, whether by night or day; consequently they are not allowed to absent themselves from the building, except by permission of the physician or of the director.

Next in order is the head attendant, who has two deputies beneath her; and is, with them, under the direction of the physician as to all medical and moral matters affecting the patients, and

also responsible to the steward for the clothing, furniture, &c., under their charge. "A good head-attendant (Dr. Pelt well remarks) is not only equivalent to the continued presence of the physician, but also a great aid to him in his duties; for he lives among the patients, is domesticated with them, and has it in his power to note their failings, and to arouse the latent energies of their torpid intellects."

The number of nurses varies according to the demand for their services; usually there are about thirty. Their relative number is greatest in the refractory ward, and next to this in the infirmary. In the other sections, containing more orderly patients, the attendants are in the proportion of one to fifteen. The paying patients of the first class have each an attendant, and it is chiefly due to the varying number of such inmates that the total of the staff of nurses fluctuates so considerably from time to time. The remuneration of the attendants increases with their length of service. Those who are married are allowed to go out one day in every five; the unmarried, once in fifteen days; the night duty is taken by them in turns.

Besides the ordinary attendants, there are five others to instruct and to superintend the employments of the patients. One is chief, and has the especial charge of the great work-room. Unlike the nurses, they are hired to attend only during the hours of labour—viz., for four before, and three after dinner.

At the time of my visit, 260 patients were under treatment: a number almost as great as the institution could accommodate. A scheme has been talked of, to extend the present building, by purchasing the houses in the narrow street bounding it on the only side where enlargement is possible; but this, I trust, will never be carried out, for it would tend to perpetuate the existence of the asylum in a most unfit locality, and under the trammels of the general hospital.

The asylum receives patients from the entire province of Venice,—from Vicenza, Padua, Verona, Polesino, Treviso, Feltre, Belluno, and Friuli. Some are also sent from Dalmatia; and, until the asylum of Halle, in the Tyrol, was instituted, patients were likewise forwarded from that province.

A system prevails of collecting the insane in the general hospitals of the larger cities, from which they are sent on in batches to Venice. The misfortune and evil of this plan is, that, just as happens among ourselves in our workhouse infirmaries, the patients are placed under unfavourable circumstances, are often maltreated or neglected, and their disease suffered to grow worse, and too often beyond the prospect of cure. This evil, M. Pelt has most sensibly pointed out in his printed reports.

The entirely dependent, or pauper class of patients, when

attacked with acute or insidious mania, are supported from the imperial treasury; but when harmless—not dangerous—incurables, when idiotic from birth, or when pellagrous, they are maintained at the cost of the commune in which they were born, or of that in which they have been domiciled for the last ten years. It is left for the commune to recover the cost from the relatives, on whom it should rightly fall, where this course is practicable.

The charge to those who have just sufficient for their maintenance is their actual cost to the institution—viz., about tenpence per day. These fare with the indigent; but those who are able to pay a shilling a day constitute the second-class of pensioners, and live, as before noted, in a distinct portion of the institution, and have a superior table. Lastly, the first-class patients pay at the rate of half-a-crown a day, have the same table as the second grade, and individually a separate room and attendant.

Pensioners are admitted into an asylum on producing a medical certificate, visé by the commissary of police, and accompanied by a petition setting forth the class to which they wish to be attached, by a month's payment in advance, and by a guarantee to continue the payment during their residence in the establishment.

The affair is much more complicated when a pauper case seeks admission. A paper has to be filled up, exhibiting a parish certificate as to his or her poverty; a statement by the medical man in previous attendance; the assent of the communal authorities to undertake all the necessary cost; the opinion of the physician of the province, respecting the stage and form of the malady, except in the case of Venice; a certificate of age, of parentage, place of birth, residence, occupation, civil position, date of attack, the history of predisposition, of the acts of insanity committed, of the course of the treatment pursued. One copy of this document is retained by the police authorities, and another by those of the hospital.

In Venice, much power is lodged in the hands of the medico-fiscal of police, who can amend the returns made by the provincial physicians, and transfer patients to or from the charge of the communes, according as he judges them to belong to the category of acute cases, or to that of the harmless and chronic.

On the entrance of patients into the asylum, they are stripped of their clothes, washed, and then clothed in the common uniform of the institution. Their old clothes, after being cleansed, are laid aside, and entered in an inventory. Each patient's name is entered in a register, in which all the particulars gathered from the certificates supplied, and all details obtainable respecting the past history and habits, are recorded. A daily account is also

kept, by the physician and assistants, of the diseased manifestations both of mind and body, of their modifications, of the treatment, the employment and diet prescribed, and of any other particulars required to fill up the medical history of the case.

When any intercurrent disease arises, and the patient is transferred to the infirmary, the case is entered on the distinct and special register of that section of the asylum. The advantage of this proceeding is very doubtful.

A commission meets every month, composed of the physician of the province, of the fiscal and one commissary of police, of the police registrar, and of the chief physician of the asylum, who submits his reports of the cases. This commission determines what patients are to be discharged cured; which may be entrusted to their friends, owing to their improved state; and which have become harmless, and may be transferred to some other institution.

Five varieties of diet are in use: Broth (*bouillon*) alone, as low diet.

I. A soup containing one ounce of vermicelli at dinner, and a like quantity of bread for supper.

II. A soup having in it an ounce and a half of vermicelli, an ounce of bread, and one of boiled veal, at noon; the supper as above.

III. A cup of coffee and one ounce of bread in the morning; for dinner, once in the week, a soup containing three ounces of rice, or two of barley; on other days, two ounces of boiled beef, two of bread, and four of wine; for supper, an equal allowance of bread, boiled in the broth. This description of diet is allowed the pensioners when in health, but it is cooked separately, and better seasoned; and at breakfast they have coffee with milk, and a sort of fancy bread (*ciambella*).

IV. The fourth description of diet includes an ounce more of each article contained in the last, besides the quarter of a fowl or two ounces of roast veal, or else of fried liver with cream, one or the other alternately. In the evening, besides three ounces of bread, either an egg, or some cheese, or legumes, with a smaller allowance of wine than at dinner, is allowed.

V. The common diet of the majority consists alternately of two ounces of bread and six of porridge on one morning; of eight of porridge and half an ounce of cheese on another; four ounces of rice or three of barley, two ounces of boiled veal, four of bread, and six of wine, for dinner; four ounces of bread, four of wine, with half an ounce of cheese, of legumes, or of salad, for supper.

It is in the power of the physician to vary the diet in any manner he sees fit, and to allow extra articles. The diet table is

made out every day, according to his directions, by his assistants. The women employed in the laundry are always allowed, in addition to the ordinary dietary, a pound of porridge and half an ounce of cheese in the course of each day.

The breakfast is given at half-past eight; the dinner at half-past twelve; and the supper at seven in the evening. The meals are eaten together in the common dining-room. The patients are kept at their several employments from nine till twelve, and from three till six; and thus sufficient time is afforded them, in the middle of the day, for rest or recreation; the misfortune is, that the institution affords no better scope for the last than the limited central court, and its surrounding arcade. At night, in the winter, the common rooms are lighted with gas, and, from time to time, dancing goes forward, or music or marionnettes chase away the monotony and dreariness of the time.

Morning prayer is not forgotten, for those who can participate in it; and on feast days the majority attend mass in the chapel, and afterwards receive visits from their relatives. On such days too, the patients are treated, after dinner, to fruit or cakes; and if the weather be bad, amuse themselves indoors with dancing and singing, or attend the musical services in the chapel—sacred music, and the organ, almost invariably affording delight. When the weather is good, a select number are allowed to walk in the garden belonging to the hospital.

The visits of friends are restricted to the two hours between ten and twelve o'clock, except those to pensioners, or where the relatives come a considerable distance, when a degree of indulgence is granted. The pensioners receive their friends in their own apartments; the rest of the inmates see theirs in the common visiting-room.

Uniformity of dress is the rule of the asylum; but it is slightly infringed by the grant of finer or more ornamental articles of clothing, given by way of encouragement and of reward, chiefly to those profitably employed in the institution. For the work done by the inmates, a regular valuation is made by the steward, and a certain proportion of the estimated value is set aside for their use and gratification. In winter, the outer dress is woollen; in summer, of striped cotton. I observed a few of the women disorderly in dress, but in general their condition was very satisfactory. The plan of strengthening the dress, or of otherwise modifying its form to meet the wants of special cases, did not appear to have occurred to the medical directors. In the instance of the shoes, we must, however, admit an exception to this statement; for in order to retain them on the feet, in certain cases

a leathern strap was crossed over the instep and fastened by a screw in the thickened sole, beneath the hollow of the foot.

The head nurses were very neatly dressed, but some of the inferior attendants were less tidy than could be wished. A particular style of dress is assigned for the use of all the attendants.

Mechanical coercion is much resorted to in case of violence, of destructiveness, and of suicide. In certain cases it is deemed indispensable; those are particularly cited in which the patient attempts to inflict injury without exhibiting marked *furor*, but, as it were, maliciously and insidiously.

The means employed are—the strait-waistcoat, made with long sleeves, which are fastened behind, the arms being crossed in front; leathern straps, used to confine the hands, the body, or the feet, in bed; a restraint bed, constructed as a long wooden box, which is filled with straw, and covered in by a strong open trellis-work—in this, the patient is fastened by the feet to the end of the “bed” by means of straps, sometimes also by the hands, and in extreme cases by a broad canvas band stretched across the body.

This terrible contrivance, which as little deserves the name of “bed” as any machine devised for torture and to chase away repose, has, in order to meet the requirements of the pensioners, and to adapt it to their more refined notions of elegance and ease, been constructed of a “sufficiently elegant pattern, in iron,” and has its edges padded.

Again, patients are confined in the ordinary beds by one or both hands or feet. Thick leathern gloves are also used at night, chiefly in cases of self-abuse. Handcuffs made of two leathern rings, connected by one or two iron links; a strap round the waist, to which the hand on each side is fastened by another strap, are among other instruments of restraint still in use, and conscientiously believed to be imperatively necessary to the welfare of the patients and the good conduct of the establishment. The feet are rarely fastened together by day; but in the refractory dormitory I saw one woman confined by one leg, by means of a ring and strap, to a fixed seat.

At the time of my visit I did not count more than eight under restraint; at night this number would be greatly increased.

Seclusion in a darkened room is reckoned among the means of repression or restraint. “The sudden forced suspension of the senses,” says M. Pelt, “acts at times upon the mind with advantage, and frequently allays *furor* in a few minutes. In some cases, however, it augments the incipient cerebral congestion, and is a

resource not to be indifferently employed." The plan of secluding patients he disapproves of, and prefers restraint to it.

In the medical treatment of the insane, M. Pelt is guided by the nature of the concomitant disorder—whether this affects the digestive or the sanguiferous system. He insists much upon derangements of the liver and digestive canal as concomitants or consequences of the mental disorder, and considers their relief to be the primary object of treatment. To relieve disorders of the circulating system, he employs local bleeding by leeches or cupping, blisters, issues, setons, the douche, the application of ice to the head, and baths. Venesection is, in his opinion, very seldom required, although it may be called for in threatened congestion, or when a patient is very robust, or has contracted the habit of losing blood at intervals. He also very justly remarks that the excitement of mania induces and is followed by prostration, which can only be increased by the withdrawal of blood; and that the less elastic or depressing character of the air at Venice is of itself a reason against so debilitating a mode of treatment. In lieu of it he prefers to apply leeches to the anus, or, in cases of nymphomania, to the nape of the neck. Blisters are of limited applicability, on account of the generally hot and dry state of the skin, when they cause greater irritation than they can do good. The actual cautery, although cruel in appearance, may be used without misgivings on account of the ordinary insensibility of the insane, and is of great advantage in active mania, dependent on the exacerbations of chronic meningitis. M. Pelt showed me a case of epilepsy complicated with chorea, in which the paroxysms were very frequent, where he applied the actual cautery on each side of the spine, for the length of eighteen inches, with very marked benefit.

The douche is commonly given when the patient is in a warm bath; it is allowed to fall either in a strong stream, or by drops, or through a rose, in a fine shower, upon the head, and is principally used in cases of mania and monomania. Its application in force for a few minutes is sufficient; if continued longer, it produces fainting. The bore of the pipe is varied in size according to circumstances; but the use of a large stream is rare, except as a means of repression. Warm-baths are employed medically and frequently, but not regularly or systematically, for the purpose of cleanliness. They are always abstained from in cases of paralysis, apoplexy, and epilepsy. Ice in bladders to the head is principally useful where there is actual cerebral inflammation.

Tartar emetic is much used to allay excitement. Opium is rarely given, because it is supposed to produce hallucinations, &

fail in ensuring healthy sleep, and to be further objectionable by its stimulating properties.

The moral management of the patients is carried out by insisting on kindness and patience of manner towards them on the part of their attendants and others; by encouraging them to employ themselves; by returning to them a portion of the proceeds of their labour, &c.; by providing them with all possible recreation, and with amusements. No coercion is used to induce them to work. Reading is almost entirely limited to the pensioners, most of the common patients being unable to read. An attempt was made to give them "readings," but it failed, chiefly from not sufficiently arousing their attention, and from the drowsy inclinations of the majority.

In the female population of this asylum, 20 of the 260 were epileptic at the time of my visit; but M. Pelt states 15 to be about the average number. General paralysis is very rare—at least, it is so stated; but it appears that many of the Italian physicians are but indifferently acquainted with its true character. The statement of M. Pelt, that he has cured cases by nervine remedies, epispastics, and frictions, must, I think, be received *cum grano salis*; for a doubt arises whether they were genuine examples of the disease.

Before quoting the statistics, a few miscellaneous particulars are worth noting.

The following classification is adopted in the Venice Asylum:—

CLASS I.—*Mania*.

1. Sub-class *Monomania*.
2. " *Melancholia*.

CLASS II.—*Dementia*.

1. Sub-class *Acute*.
2. " *Chronic*.

Appended division Idiocy.

A peculiar plan was started in this asylum a few years ago, by Dr. Fassetta, of indicating the class or sub-class of mental disorder by a particular colour—viz., mania, by red; monomania, by blue; melancholia, by green; acute dementia, by yellow; chronic dementia, by a different shade of (pinkish) yellow; and idiocy, by olive. With the notion of promoting order and method in the establishment, these distinctive colours are woven in the dress of the patients, so that the particular form of their malady is at once patent to the eyes of the initiated observer.

The asylum is inspected every month by the Physician of the Department, and the Commissary of Police; and a monthly report

is required by the Government, in addition to one returned every fortnight to the local authorities.

An excellent regulation enforces six months' attendance at this asylum of all candidates for a degree in medicine. We may well take shame to ourselves, that in this country our governing bodies have not yet seen the necessity for such a regulation; but, on the contrary, have ignored the study of psychological medicine, whilst they have made natural history an integral part of the medical curriculum.

TABLE I.

Movement of the Population in 1846, according to the form of Insanity.

Form.	Existing.	Admitted.	Discharged.	Dead.	Remaining.
Mania	86	102	62	29	97
Monomania	34	25	17	6	36
Melancholia	34	24	23	12	23
Acute dementia . . .	41	36	10	28	39
Chronic dementia . .	65	8	1	19	53
Idiocy	12	1	1	5	7
Total	272	196	114	99	255

The mortality this year was rendered so considerable by the prevalence of pellagra among those newly admitted. In 1844 and 1845, the total in figures stood thus in each year:—

	Existing.	Admitted.	Discharged.	Dead.	Remaining.
1844	268	192	77	115	268
1845	268	189	113	72	272

In 1844 the high range of death was due to the same cause as in 1846, which in 1845 had been in a great measure overcome. Still, even in this, the most favourable year as far as concerns the mortality, this last is exceedingly great when compared with that in our own asylums, although explicable by the havoc caused by pellagra, as subsequent Tables will presently show. The total number in that year under treatment being 457, and the deaths 72, above one-sixth ($6\frac{3}{4}$) died—*i. e.*, about 17 $\frac{1}{2}$ per cent. The year 1844 was exceptional, on account of certain changes going forward in the organization of the asylum: setting it aside, therefore, and taking 1845 and 1846, we find that of the total number under treatment, nearly one-fourth was discharged, or 25 per cent. No division of the number discharged, into cured and relieved, is attempted; however, M. Pelt says the proportion of the latter does not exceed 6 per cent., although it includes incurables, who are sent away to some other establishment, or to their friends, as harmless. Deducting this 6 per cent. from the 25 per cent. discharged, it would appear that the ratio of cures to the total number under treatment in the year is about 19 per cent.

TABLE II.
Relative Ages of Patients.

	Existing.	Admitted.	Discharged.	Dead.	Remaining.
Under 10 years . .	2	3	—	3	2
From 10 to 20 . .	13	16	10	14	5
" 20 " 30 . .	68	119	68	58	61
" 30 " 40 . .	71	165	90	60	86
" 40 " 50 . .	72	119	68	61	62
" 50 " 60 . .	32	86	45	47	26
" 60 " 70 . .	8	48	18	27	11
" 70 " 80 . .	1	16	5	10	2
" 80 " 90 . .	1	5	—	6	—
Total . .	268	577	304	286	255

This Table exhibits the great proclivity of females to insanity during the period of greatest uterine activity. The maximum is reached between the 30th and the 40th year—the fourth decennial period.

TABLE III.
Civil Condition of the Patients.

	Existing.	Admitted.	Discharged.	Dead.	Remaining.
Married . .	122	260	136	149	97
Widows . .	36	110	59	49	38
Unmarried . .	110	207	109	88	120
Total . .	268	577	304	286	255

Hence it is shown that the married are most frequently the subjects of insanity. The value of this fact would be more precise, did we know the civil condition of the whole adult population of Lombardy, and the relative proportion of married and single women.

TABLE IV.
Causes of the Malady.

	Existing.	Admitted.	Discharged.	Dead.	Remaining.
Moral, generally . .	112	153	93	72	100
Physical, generally . .	61	80	36	60	45
Luxury and pride . .	16	17	13	8	12
Excesses	4	34	15	7	16
Pellagra	42	248	130	103	57
Epilepsy	11	18	4	11	14
Old age	2	22	3	19	2
Unknown	20	5	10	6	9
Total . .	268	577	304	286	255

This Table brings to our notice one of the greatest modern

scourges of Lombardy—viz., Pellagra, which we find tabulated as the cause of insanity in 290 cases of 845 under treatment; as fatal in above two-fifths of those admitted suffering from it, or in more than one-third of the total number of cases; and as the cause of 103 out of the total of 286 deaths.

The admissions are most numerous in summer, particularly in June and July. The deaths, on the other hand, augment between July and November; but the difference in their relative frequency in the several months is not nearly so striking as that of the admissions.

TABLE V.
Immediate Causes of Death.

DISEASES.	Mania.	Monomania.	Melancholia.	Acute Dementia.	Chronic Dementia.	Idiocy.	Total.
Meningitis	2	—	—	1	—	—	3
Bronchitis	2	1	—	3	—	—	6
Pleuritis	—	—	—	—	—	1	1
Gastritis	4	—	—	1	1	—	6
Hepatitis	1	—	—	—	—	—	1
Enteritis	5	1	2	2	—	—	10
Arthritis	—	—	1	1	—	—	2
Phthisis	6	—	2	2	1	—	11
Marasmus	10	4	14	18	11	1	58
Ascites	3	3	1	1	—	—	8
Pulmonary catarrh	4	1	3	—	3	1	12
Precordial disease	—	1	1	1	1	—	4
Apoplexy	3	—	1	4	3	—	11
Paralysis	3	—	—	7	7	1	18
Epilepsy	3	2	1	—	3	1	10
Diarrhoea	28	2	12	15	21	3	81
Dysentery	—	1	—	—	—	—	1
Scurvy	6	3	8	7	4	1	29
Cerebral congestions	1	—	—	1	—	—	2
Erysipelas	—	—	—	—	1	—	1
Articular abscess	1	1	—	—	1	—	3
Variola	1	—	—	1	1	—	3
Old age	—	—	—	—	5	—	5
	83	20	46	65	63	9	286

Diarrhoea takes the lead among the immediate causes of death—a fact at once explicable by that disorder being the most frequent complication of pellagra. It occurs either in a colliquative or ulcerative form. The next most prevalent cause stated is, maras-

mus; but, unfortunately, this is usually only a symptom of some internal or constitutional disorder. That it figures so largely in the above Table is doubtless due to its being a very frequent consequence of the most widely-acting cause of insanity in this region—viz, pellagra. Scurvy stands third in order among the causes of death, and is due, like pellagra itself, to the insufficient nutriment obtained by the poorer classes, which mainly consists of Indian-corn. The relative proportion of the other assigned causes in the Table calls for no particular observation.

From a review of the history of this Venice Asylum, the reader will, we think, be ready to admit that much merit is due to its managers for its internal organization and superintendence. They have to contend against the greatest disadvantages of site, the very indifferent adaptation of its structure to the wants of lunatics, and the daily difficulties involved in its connexion with the general hospital. It is sad to have to record the employment of so much mechanical restraint; but we must allow for the prevailing prejudices of the physicians of the country in its favour, and for the impediments to its entire abolition existing in its confined site and inappropriate structure: and we may hope that the diffusion of the knowledge of what has been and is done in British Asylums will encourage our Italian coadjutors in psychological medicine to imitate our practice. On the contrary, it is highly gratifying to see how much has been done in Italy for the helpless insane; how evidently their medical guardians are animated by the most generous feelings and zeal for their welfare. Thus we find them here, at Venice, encouraged to employ themselves; rewarded for their work; diverted by amusements and recreations; and instructed in religion. Their excellent and skilful physician, Dr. Pelt—to whom I owe my best thanks for much kindness—is fully alive to the deficiencies of the asylum, and anxious in every way to remedy them. He deplures its confined limits, and expresses himself decidedly against the separation of the laundry, as a place of employment for his patients, from his own jurisdiction and the confines of the asylum. But in Venice Proper—built as it is on a group of mere mud-banks, but a few feet above water-mark, and united by bridges—no spot can be found at all fitted for an asylum. Such the mainland alone can supply; yet, in spite of the multitude and the magnitude of the evils attaching to the present institution, the day is, I fear, far hence before a transfer will be made.

The Asylum of St. Servilio, for the male lunatics of Venice and of a considerable part of Lombardy, is, as we have already remarked, under the management of the religious brotherhood of St. Jean de Dieu. It occupies a small island in the Lagoon, about a mile from Venice, of which it commands a fine view.

The whole area of the island does not exceed four acres, and nearly one-half of it is covered by the buildings, which, although principally arranged around an inner court, as a hollow square, are also extended irregularly by additional sections. Besides a chapel, there is a good-sized church, distinguished at a distance by its two ornamental towers. The edifice, which was originally built for a convent, and is of considerable age, is of stone and brick, and of three stories. The visitor reaches the principal door in his gondola: for the walls on two sides are washed by the Lagoon, which, fortunately, has at this part a considerable current; few cases of fever are therefore met with.

The windows are everywhere guarded externally by iron bars: the present director, however, proposed to remove them from most parts of the building. The windows of single rooms, in which refractory patients sleep, are defended inside with wooden shutters, perforated by a square opening, high up, to admit light. The windows throughout are of sufficient dimensions—generally about 5ft. high and 3ft. wide—and constructed with wooden frames.

The height of the rooms on the ground floor is considerable—from 15 to 20 ft.: the largest of these rooms are subdivided by two rows of columns along their length, to support the floor above. On the first and second floors the elevation does not exceed 10ft. The floors are everywhere formed by the marble concrete.

Besides the principal court, there were two smaller ones: one set apart for the noisy and refractory patients; the other surrounded by the general offices,—the kitchen, dispensary, bakehouse, flour-store, &c. The wash-house formed a separate out-building. The kitchen was not in a good state; but it was the intention of the authorities to build another.

The visiting-room was fitted with a sort of counter extended across it, on one side of which the patients were placed during their interviews with their friends, who stood on the other. Among other necessary apartments were, a dead-house and post-mortem room, an office for the director, and a small museum.

The church used by the patients is of moderate size, ornamented with a few good paintings and with decorated altars, according to the practice of the Church of Rome. All the patients whose condition admits it attend once every Sunday, and many also on other days of the week.

The great majority of the patients sleep in dormitories, most of which contain from twenty to thirty beds, and several of them occupy the entire width of the building. Their walls are whitewashed like those of other rooms, and bare of ornament, except here and there a crucifix or the figure of a saint: at

night they are faintly lighted by a lamp. Some of them,—chiefly those on the ground floor,—were less clean than could be wished, and smelt disagreeably of urine. The infirmary is large and lofty, and adjoining to it is a spacious and cheerful dormitory, set apart especially for convalescent infirmary patients.

Single rooms are placed both on the ground floor and on the upper floors, on each side a corridor, about 11ft. wide. They are about 13ft. square, and are severally furnished with a bed and a small night-commode, and in some cases with additional furniture. Small inspection doors, about 9in. square, are placed in the door of each single room; one such room, having its walls covered with a composition to give them greater softness, was used for seclusion, and no light being admitted, the patient was in complete darkness.

In a few rooms two patients were placed together, each having a separate bed. Every dormitory has a small lamp burning in it during the night.

The ordinary bedsteads and bedding resembled those in use in the female asylum. Dirty patients were provided with a wooden crib, which is filled with straw, and fitted with a wooden frame supporting a piece of canvas, not stretched out, but hung loosely, resting upon the straw, so that it may form a sort of fixed sheet. Upon this the patient lies, and is covered over by the usual coverlets. By this contrivance the advantage of the straw as a bed is secured, for the patient cannot get at it to strew it about; while at the same time he has a softer and better bed than could be afforded him if the canvas were tightly extended upon the frame, upon the plan of the stretchers so much used in this country, and which are both hard and cold. To resume the description. The bottom of the crib is perforated by a hole, through which the water escapes into a wooden drawer about 2ft. long and 1ft. wide. The straw is changed when found wet; but the fixed sheet upon it does not receive that attention which is desirable, for it frequently appeared to be allowed to dry in its place, instead of being removed and properly washed.

An attendant sleeps in each dormitory, and during the night four are employed watching and perambulating the building. The patients are attended to on going to bed; but the dirty cases are not afterwards disturbed, for the director holds it to be a very injurious plan to break the rest of the insane.

There were two bath-rooms, each containing two stone baths, sunk in the floor two-thirds of their height, and without lids; they did not appear to be much in use, and were employed only medically. Arrangements existed for affixing above them a

douche-pipe. A third bath-room was occupied by a cold plunge-bath, eighteen feet by ten feet, with four feet of water, which was daily used during the continuance of warm weather. No provision for washing the hands and face was seen in any part of the building.

At the period of my visit there were three hundred and thirty patients in the institution, of whom about forty paid for their maintenance, the rest being paupers. Just as in the case of the female asylum, the pensioners lived in a separate section of the building, fared better, and had a separate day-room. The indigent patients eat together in the dining-rooms which severally belong to their separate divisions. The tables are of stained wood: they are allowed forks and spoons, but no knives; and three meals a day, in two of which meat enters as a part, except on fast days. Like the female patients, the men are dressed uniformly—during winter, in woollen jackets and trousers of a dark-brown or nearly black colour, with cloth caps; in summer, in blue linen or cotton trousers. Blucher boots are worn in winter; in summer, only a sort of slipper. It was pleasing to witness in this asylum an attempt to modify the clothing to meet the exigencies of particular cases; for not only could the boots be secured on the feet, where the tendency was to run barefoot, but a canvas dress, of waistcoat and trousers, was in use for destructive and dirty cases.

The management of the establishment is entirely in the hands of the Frères of St. John. The director, M. Portalupi, who is also the chief physician, is one of the fraternity, and has under him seven of his own order. These act as heads of departments and chief attendants, and employ a number of hired sub-attendants, who are under no religious vows. There is also a visiting physician.

The asylum was conducted on a similar system to that for the opposite sex. The value of employment was very justly appreciated, and the encouragement to work was aided by the distribution of rewards. Everything required for the use of the establishment was prepared within its walls; hence, for the first time out of England, we met with shoemakers, tailors, carpenters, smiths, bakers, &c., at work at their several trades. The washing was also done on the premises. In all, about eighty were regularly employed in mechanical work. Among the provisions for the comfort of the inmates was a library of books; and the gallery of communication between the private apartments of the managers and the workshops, was constructed as a greenhouse and filled with flowers, tended by patients.

Those not engaged in any sort of work are taken out twice a day into the garden; for, in respect of space, the male asylum enjoys a great advantage over that for the females. Although

island is so small that it cannot allow much room for garden cultivated ground, yet it suffices to give employment to a few, and furnishes a tolerably-sized garden for exercise. This garden is planted with trees, laid out in walks, and has in its centre a high artificial mound, surmounted by a summer-house, from which a charming view is obtained over the whole vicinity, including the beautiful city of Venice itself, the islands dotting the Lagoon, and the mainland in the distance. Two other plots of land, like the garden, walled round, are set apart for cultivation—one of them as a kitchen-garden; and to render the rustic character of the establishment complete, cows are kept to supply the inhabitants with milk.

The same system of classification was in use here as in the other asylum, and the same principles of treatment. Bleeding was very rarely resorted to; opium and morphia were occasionally used as narcotics; prolonged baths had not been tried, and the use of the douche was limited to refractory cases, as an instrument of repression. The stomach-pump was very seldom employed to feed refractory patients, their rejection of food being overcome by other means.

Mechanical coercion is considered a necessary instrument of treatment, and is effected by similar means to those enumerated on preceding pages. Still, its use was not widely extended; for but of the three hundred and thirty patients, not more than five were seen by me under restraint. It is chiefly resorted to for homicidal and suicidal cases, of which some twenty-four were reckoned to exist at the date of my visit. The contrivances in use were, the camisole, belt, handcuffs, the "muff," stiff leather shoes, and a woollen jacket made to button in front, and at the side seams, so that when buttoned upon the patient the arms were confined to the sides. In rare cases, the legs were confined by a belt of sufficient length to allow the wearer to move along. Leather gloves were exclusively used in cases of self-abuse, and, as I understood the director, except these no instruments of restraint were employed during the night.

It should be mentioned that this establishment of St. Servilio, though chiefly limited in its purpose to the care and treatment of the insane, is, in addition, an hospital for a limited number of surgical cases, which occupy two large wards, and are under the charge of the brethren. The retention of such cases is excusable by reference to the history of the institution, which makes known to us that, prior to its adaptation for lunatics, it was an hospital chiefly for surgical patients, and that the care of the insane was only a subsequent task undertaken by the good monks.

My visit to this Asylum of St. Servilio afforded me much gra-

tification. Its managers were evidently at work in the right direction. Its wards were generally in good order, and clean; its mechanics well occupied, and its non-industrial population well looked after and exercised; and I am persuaded, from the humane and intelligent character of the director, that he would be one of the first to abolish restraint, could he shake off the trammels of the dominant opinion of his country, and witness the non-restraint plan of treatment in practical working.

Verona.—This ancient Italian city, which offers so many objects of interest and attraction to the tourist, and is of so great importance to its possessors as a first-class fortress, possesses no asylum, properly so called, for the insane. The only provision made for them is such as reflects the highest discredit upon the Austrian administration of this province, and is in itself productive of misery, wretchedness, and cruelty to the unfortunate patients.

The accommodation provided is in connexion with the large general hospital—an irregular group of buildings, some of considerable age, and others of modern construction. The lunatic department is very subordinate, and greatly neglected: it occupies several small buildings and wings, very ill adapted to their purpose—some of them very ill built, and all of them wretchedly kept—assigned to the helpless insane as the least eligible and useful for any other purpose, and because some sort of habitation must perforce be found for them. Both sexes are received, and the credit must be given to its managers that they are placed in completely distinct buildings. The women occupy three small, low-vaulted dormitories on the basement, with stone floors, badly lighted and ventilated, and altogether very dull and miserable.

A few of the male patients, who are very quiet and tractable, live separate from their refractory companions, but are, nevertheless, very indifferently off for accommodation. They have a small garden to themselves for exercise. The refractory, who constitute the majority of the male patients, are lodged in a small, detached, low building of one story, with barred windows and a stone floor, so laid as to slope from each side towards a grooved drain running from one end to the other. The whole aspect of this apartment was rather that of a stable than of a dormitory for the residence of human beings—indeed, many English stables are far more warm, sweet, and comfortable. The occupants of this room were disposed in beds arranged in a row on each side, and, so far as I could learn, were very rarely permitted to leave their beds. No effectual means of enforcing this condition of repose were omitted; the hands and feet were made fast by leathern straps to the bedstead, and, if required, a belt across the body could be added. The bedsteads were of

wood, very thick and heavy, and constructed in a crib-like fashion, filled with straw, over which a very coarse brown linen sheet or piece of canvas was laid, to serve as an under-sheet for the patient. Another such sheet covered him, with the addition of a very coarse woollen coverlet. Being unable to help themselves, the urine was always necessarily passed under them, and after percolating through the straw, diffused itself over the stone floor, until it reached the central gutter, whence it could flow along to one end of the building and escape. The mode of distributing food to these unfortunates was on a par with the rest of the treatment. The soup—their only diet, except bread—was brought to them in pails, out of which a basin was filled for each. As they were helpless by restraint, the services of their attendants were required to feed them. We must add to the above account, that the heads were generally shaved, and that the phlebotomist had constant employment to keep under (?) the cerebral excitement, indicated by the perpetual noise and restlessness of the refractory inmates.

To render to every one his due, we must state that the soup and bread appeared of good quality, and well adapted for nourishment—better, indeed, than unfortunately falls to the lot of a large part of the poor of Lombardy.

The male attendants belonged to a religious order—as I understood, of St. Euphemia. There was no special physician for this section, its duties falling casually upon the physicians of the general hospital—particularly upon the medical director, as superintendent of the entire establishment. The offices, kitchen, laundry, dispensary, &c., were common to the whole institution.

When I made my visit, there were forty insane patients in this section of the Verona Hospital; of these, eight were pensioners, permanently resident. Happily their condition was tolerably satisfactory; they occupied a distinct building, having a small garden, and each one had his own room, sufficiently furnished and comfortable. When quiet, considerable liberty was accorded them to walk about in the grounds of the hospital.

The pauper patients are, unless there is speedy prospect of their recovery, retained at Verona for only two months, at the end of which time they are sent to the asylum at Venice, with small prospects, we apprehend, of deriving much benefit when they get there, the preliminary treatment they have undergone at Verona being taken into consideration.

Our readers will peruse with pain and astonishment this account of the treatment the insane receive in a large city of the Continent in these latter days of enlightenment and charity; but we greatly fear that, if the condition of the insane in many of the large Lombard cities (in the general hospitals of which

they occupy an inconsiderable and neglected section) were inquired into, Verona would not be found exceptional in its mode of treating them. Lombardy, alas! is not only now a very impoverished country, but is held in rigorous subjection to a foreign race by military force, to the support of which, as well as of the civil government, it is made heavily to pay; and, as a consequence, no funds are to be found for such purposes as the building and endowment of proper lunatic asylums.

Brescia.—Within the walls of this city is a nearly new asylum, which constitutes an appendage of the general hospital, and to which it is united by corridors. As in similar instances, the general offices are common.

The building forms two hollow squares, one assigned to each sex, with an intervening garden of about half an acre in extent. It has only two floors—a basement or ground, and a first floor: around each is a covered corridor. That on the first floor is nearly ten feet wide, and on its open side, looking into the central court, forms a series of circular-headed spaces with intervening square columns, the open spaces being filled in with upright iron rods, crossed by others at intervals of about two feet. This corridor would have a very good effect were it not for its barricaded spaces, which give it a cage-like appearance. The ground floor is occupied by the day and dining-rooms, by some single rooms, and by the bath-room. The concrete of the floors of these rooms is laid immediately upon the earth, and, in consequence, is frequently moist from the transudation of moisture. One of the day-rooms on the women's side was small, badly lighted by one window, and so constructed that one half was at right angles to the other.

On the first floor were two dormitories, called infirmaries, both of which were unoccupied on the male, and one on the female side. The larger one on each side would contain from twenty-four to thirty beds; the smaller was about half the size. My visit was made in March; later in the spring, I was assured, these vacant rooms would be filled with cases of pellagra. The elevation of these dormitories was good, viz., about fourteen feet; but they were rendered dull and dreary by the half-circular small windows being placed seven feet above the floor. Except the portion occupied by the infirmary dormitories, the rest of the first floor was constructed with a corridor, having a row of single rooms on each side, but not terminated by an end window. These rooms were about twelve feet by ten feet, and contained each a bed, a fixed seat at one corner, and generally a recess in the thickness of the wall, to serve as a receptacle for the clothes of the occupant.

The window of each single room was rather high up, barred

on the outside, and its wooden frame covered, in place of glass, with canvas sufficiently thin to admit light. This mode of filling a window-frame has certainly the merit of economy, and may not be uncomfortable on a warm summer's night in this part of the world; but we much pity the unfortunate patients who have to pass a long winter's night in rooms so imperfectly shut from the outer air. In the infirmaries, indeed, the windows were glazed. The doors of the single rooms opened outwards: the floors were of concrete or stone.

Some of the stairs were winding, and, to obviate danger, their "well" was covered at the landings by wirework. In this, as in the other Italian asylums described, little attention was bestowed upon warming the rooms in cold weather; the discussions of systems of warming and ventilating asylums in this more northern clime have not, it would appear, aroused the attention of Italian physicians and architects. Certainly they have much less need to make provision against cold; yet, notwithstanding, a winter in northern Italy is not to be braved without fires, and much suffering must be entailed upon the inmates of public institutions by the prevailing absence of any attempts at systematic warming. Here, in Brescia, an Italian stove, placed in the centre of one or two of the day-rooms, surrounded by stout guards, was all the means provided.

A small chapel, calculated to accommodate about fifty persons, had been built for the patients; it presented nothing remarkable to note.

I found many patients in bed, not apparently labouring under any bodily sickness demanding repose, but placed there apparently as a means of seclusion and confinement. In the case of the men, I noticed that all, or nearly so, were under restraint, attached by a foot or an arm to the bedstead. Indeed, restraint was used in this asylum in an irregular, loose, and most reprehensible manner. No employments and no amusements for the patients were attempted; the construction and very limited space of the building admitted of no proper classification, and, what was worse, none appeared thought of; hence confusion, disorder, noise, and misery reigned supreme, and the only check the managers could devise was that furnished by mechanical restraint. This appeared not only in the poor prisoners in their rooms, condemned to seclusion and the tedium of bed, left to cherish their disordered fancies and to sink deeper into despair, but in many more besides, wearing camisoles, handcuffs, and here and there one with hobbles on the feet.

To the same want of management, to the same neglect, were due the frequently disorderly or ragged clothes, the naked feet, and the dirty habits of many of the inmates.

The bedsteads for refractory cases were well supplied with rings at the head, foot, and sides, for the passage of straps for restraint: the dirty slept upon straw, through which the urine percolated on to the floor, no attempt being made to collect it. No special provision for epileptics and paralytics was thought of; but they were treated as ordinary cases, and slept on straw as dirty cases, or had beds like the clean,—consisting of a pailasse, a flock bed, a pair of sheets, a woollen, and over all, a striped cotton coverlet. The bedsteads, except those for foul cases, were of iron.

Rather over two hundred patients were detained in this asylum at the period of my visit, and, as elsewhere, formed two classes—pensioners and paupers—the former, however, in very small proportion. For the number resident, the accommodation was much too small.

Although a section of the general hospital, it had its special physician, who visited once or twice daily. An interne on the male side, and a sort of matron on the female, each with the title of inspector, are in constant residence within the building.

Not having had the advantage of being accompanied over the institution by the physician himself, but by a colleague attached to the general hospital, there are many matters touching the internal regulation of the asylum, and the treatment pursued, which I could not ascertain. Respecting the medical treatment, I learnt that bleeding, both general and topical, was very much resorted to, and that opiates were very seldom employed. Pellagra affected at least one-half of the population of the asylum.

The garden between the two divisions was common to both sexes; but they were taken for exercise in it at different hours of the day. The view from the garden, and indeed from the asylum itself, is very limited, by the proximity of the ramparts of the town, which are considerably raised above the level of the land inside them.

Unlike several of the Italian asylums, that of Brescia had the advantage of being specially built for its purpose—an advantage, however, almost completely negated by the very faulty plan of its construction, and, for every good result, entirely sacrificed by bad management. All the modern improvements and ameliorations in the condition of the insane, and all the teachings of modern pathology respecting their treatment, appear either unknown or uncared-for by the authorities at Brescia. There is great need for some asylum reformer to visit the institutions of Lombardy, and to teach the doctrines of Pinel, Esquirol, Conolly, and of the other noble men who have laboured in the cause of the insane.

Aversa.—The town of Aversa is situated about midway between Naples and Capua. Its name is well known to psychological physicians, because the principal public asylums of the kingdom of Naples, which are in its immediate neighbourhood, gained for themselves much credit by being among the first to employ their lunatic patients in various kinds of work. However, at the present period they would occupy but a low place in the scale of merit among the asylums in Europe; for, although the advantages of employment are still duly appreciated, yet they have not in other respects followed the march of progress in the moral management of the insane, which has so rapidly advanced in this country and elsewhere.

The two sexes are accommodated in distinct buildings: that for the women is in the town of Aversa; the one for males is some distance from the town, on the high road towards Capua. A third institution exists in the vicinity, for epileptic and imbecile cases, under the direction of a religious fraternity. The asylum for females, in Aversa, I did not see, but heard that it was a very indifferent and unsuitable building. The one for the men is considered the best; unfortunately, my examination was imperfect and hasty, as I found no medical officer in the establishment, and had only one of the attendants to act as my conductor through it, and had no opportunity of repeating my visit.

The situation of the asylum is very good; the surrounding country of great beauty, and well cultivated; but, owing to walls and out-buildings, the beauty of the scenery is hidden from the inmates, except when in their sleeping-rooms upstairs. The building is partly erected in the form of a hollow square, but is rendered irregular by other portions added from time to time. The principal edifice is of three stories in height, whilst other parts have only two floors. Except three moderately-sized airing-courts, no other ground is attached to the institution. On entering the building, the visitor first reaches an enclosed court, surrounded by the general offices and work-rooms, which occupy the ground floor, and have dormitories above them. This court is surrounded by a covered corridor or arcade.

Owing, doubtless, to progressive alterations and additions, there is an irregularity in the interior, some wards being on a different level to others, properly speaking, on the same floor, and therefore reached only by mounting or descending a few stairs; moreover, from the like cause, the elevation of the different rooms varies considerably, and in some is deficient. Their floors are paved with tiles, their walls whitewashed and bare, and the windows barred externally. Although little objection

could be taken to the degree of cleanliness generally presented by the asylum, yet, taken as a whole, its interior aspect was dull and heavy, and did not realize an Englishman's idea of comfort.

I saw no single rooms, although several small ones existed in which two patients were placed together. The dormitories differed in size—the largest contained from twenty to thirty beds: in each of them an attendant sleeps, in a small apartment partitioned off, but so constructed as to command a view of the entire room. A light is burnt in every dormitory during the night. To meet the wants of the patients when in their sleeping-rooms, a large pail or tub is attached by a chain to the wall at one end of the room, for chamber utensils are not allowed. The upper floors are, at most parts, built with a central corridor, having rooms opening from it on each side.

The bedsteads consist simply of some flat boards, resting on iron trestles at the head and feet: on these are placed a palliasse, a flock bed with sheets, a woollen and a cotton coverlet. Dirty patients were allowed a palliasse only, and no bed or sheets. For the particular forms of insanity complicated by paralysis and epilepsy, no specially constructed beds were supplied. During the day the bedding was rolled up towards the head of the bedstead, after the fashion seen in barracks and in a few of our own asylums.

The patients were nearly three hundred in number, and of two classes—pensioners and paupers—the former in comparatively very small proportion. The attendants seemed tolerably numerous; and owing to the greater part of the inmates being occupied at work, there was an air of activity, quiet, and content, not witnessed in those asylums where employment is omitted or neglected. Some of the inmates work as tailors, others as shoemakers, &c.; but the majority are occupied in the large weaving-room, at hand-loom, making cotton and linen cloth for the use of the institution, and as an article of sale. The room for the weavers was of large size: the duration and the amount of work exacted from the patients seemed too great, whilst means of amusement and opportunities for recreation were too much neglected. Of the several modes of employment in which the insane are engaged, that of weaving appears to me one of the worst adapted to their condition, by reason of the confinement it involves, the monotony of the task, and the imperfect character of the exercise it calls upon them to take. The work certainly is anything but exhilarating; the atmosphere of a weaving-room becomes dusty and close, and the clatter of the machines dreary by its sameness, and musical to no other ears except those of the master, who reaps the fruits of the work. In short, weaving is a

description of labour inimical to mental discipline and development, and opposed to the physical well-being of the body.

I should have rejoiced to have seen the inmates of Aversa engaged in gardening and tillage; but this, the most healthy and cheerful employment, is neglected; in fact, the asylum possesses no land for cultivation. The only outdoor provision for the patients is furnished by the three small exercising courts, which are of themselves sufficiently agreeable, although inadequate to the wants of the asylum, and dull by not affording any view beyond their restricted boundaries. They were, however, pleasantly planted with trees and flowers, and gave occupation to two or three inmates.

Restraint, I was told, was little resorted to; but neither of this matter, nor of the general moral and medical treatment, have I, unfortunately, any details. The general impression I formed respecting this asylum of Aversa was, that it was far behind, in construction and management, the asylums of this country, and many of those of France and Germany. The irregularity of the interior, its bare walls, barred windows, the absence of the means of amusement, and the seeming pursuit of employment as a source of profit, imparted to the whole institution a dull, heavy, comfortless aspect, and, owing to its limited outdoor space, the air of a place of confinement.

I have met with the following statistics of the asylum under consideration, in connexion with that for the females:—Between 1813 and 1841 inclusive, there were admitted 4165 men and 1741 women; a total of 5906. Of these, 1535 males and 600 females were discharged cured; 612 men and 148 women, uncured or as found not insane; whilst 1486 and 758 of each sex severally died; a total of 2244. Taking these figures, the per centage of cures on the number of admissions appears to be 36·1; and that of deaths, 37·9. The statistics of 1841 were as follows:—Remaining in the establishments, 532 males and 146 females; total, 678. Admitted of each sex severally, 186 and 90—276 in all. Discharged cured, respectively, 63 and 18; uncured and not insane, 39 and 13—a total of 133 discharged; deaths, 84 men and 70 women; in all, 154. Hence the per centage of cures was 29·3 on the admissions alone, and when calculated on the total of admissions and the previous number under treatment, only 8·4; whilst the proportion of deaths to the admissions was as high as 55·7; or to the admissions, plus existing cases, or the total population of the year, 16·1. Between 1846 and 1848, inclusive, the figures were:—Admissions, 599 males, 248 females; cured, 201 and 75; uncured and not insane, 143 and 55; died, 267 and 93. Thus the cures to the admissions were 32·5 per cent., and the deaths 42·5.

These statistics prominently show, among other facts, how much larger is the number of male lunatics admitted than of females—viz., two-thirds more. Another striking fact elucidated is the very high rate of mortality, which exceeds that of most asylums of Europe, if we except the Parisian, in which general paralysis makes such terrible havoc.

ART. IV.—THE CONDITION OF THE INSANE.

BY JOHN HAWKES, M.B.C.S., ETC.

IF one particular feature of the epoch in which we live deserves to be characterized as a "sign of the times," there can be no hesitation in denoting the general attention and almost universal sympathy with which our insane are regarded as a striking circumstance in the history of this present age, directly pointing, as it does, to the influence of increasing Christian civilization in ameliorating the condition of all mankind, and of promoting among its different classes a kindly spirit of mutual regard, leading to the exercise of those heaven-born virtues through which man, not content with raising himself, stretches forth his hands to lift his fallen brother to the dignity of a lord of the creation.

We need not the perusal of reports to assure us how heavy must be the burden of insanity to a nation; but those who least regard the matter may well be appalled to hear that in England and Wales there are 21,311 insane persons under treatment in various asylums; there are some, perhaps, besides these, beyond the cognizance of Government inspectors, and, in addition, it may be feared many mental aliens are at large on society. It is therefore almost impossible to arrive at a positive appreciation of the amount of insanity existing under different forms throughout the country. It will suffice, however, for my purpose to consider this army of insane under two chief divisions—first, those that are met with in the hands of private individuals; and, secondly, such as are treated in the wards of public asylums. Of the former, we are informed by the last Report of the Commissioners in Lunacy, there are 2578 in metropolitan, and 2598 in provincial licensed houses. Out of one hundred and sixteen private asylums, not more than forty-six are entrusted to the hands of persons destitute of any professional qualification; these are doubtless humane and enlightened men and women, whose high aim it is to promote the restoration of reason to their unhappy patients, and to "comfort the feeble-minded," quite irrespective of any other considerations, though there may be some cause for appre-

hension that, amidst the anxieties attendant on so important a charge, precepts of trade are not wholly ignored, nor a little brisk business, strongly partaking of speculation, altogether disregarded; that even under luxurious refinement lurks gilded misery, and in the chambers of first-class patients the air of a commercial enterprise;—else why these advertisements setting forth in glowing eulogy the sweet Elysium, or why the trumpet-tongued announcement bidding patients walk up hither? It is scarcely affirming too much to say that the greater number of such establishments are little short of private hotels, and that the benevolent proprietor or landlord sees no harm in mixing up philanthropy and trade; indeed, if he can lay claim to a slight degree of taste, it is even possible his house may possess external features, at least, rather pleasing, provided the illusion is not too abruptly dispelled by some enormity in the decorative department; for there can be nothing more painful to look upon than one of these houses “licensed for the reception of the insane,” plastered and painted in the highest style of embellishment, and surrounded by gaudy flowers, while through the narrow, small-paned windows come groans and sighs, or curses long and loud; pale, speechless faces peering through iron bars, and restless eyes, which once shone with love and gladness, gleaming forth in frenzied woe. Equally sad, perhaps more so, to witness a place of detention for the mental afflicted, in that state of dilapidation which says so plain ‘tis not worth laying out a sixpence on the property, for the sombre, damp-stained walls are half-concealed by straggling, ill-grown trees, and all around an air of desolation. The “large and extensive pleasure grounds,” overrun with nettles and long rank grass, and the paths, untrodden by human feet, are green with moss and slime. Could we get round to the back of the premises, more than one window would be seen boarded up to within a foot of the top, while a few remaining fragments of glass testify to the raving madness of some former occupant of that dreary apartment. And though, for the sake of humanity, we may hope such establishments are few and far between, it is well to remember that till within the present half century this was by no means the case; and much as we have advanced in the treatment of our insane, both in public and private asylums, there yet remains a great deal to be accomplished before we can be beyond reproach. Let us never forget the debt we owe to the early champions of reform. Under their gallant leadership, the onward current of public opinion has swept away many foul and cruel abominations, which full long held their sway; but the name of Pinel will remain to future ages emblazoned, with undying lustre, in his country’s scroll of fame. Genius alone may command respect, scientific skill

may claim admiration, but philanthropy that spends and is spent in the cause of humanity deserves our highest praise. It is, indeed, refreshing to turn for a moment from considering the wretched shifts and unprincipled expedients of worthless, low-minded men, who traffic in the harrowing misfortunes of madness, and drive bargains with friends hardly less to be pitied than the miserable objects of speculation—it is, I say, delightful to turn away from such as these to contemplate the pure, unselfish devotion of those influenced by higher and purer motives; but though the vast results of their humane exertions are readily obtained by the wealthy, and are even consecrated to charity, a large and important section of the community, known as the middle class, is placed in some degree beyond the direct influence of good which ever surrounds, as a halo of light, the labours of the true physician. It should be remembered, until of late years, how large a proportion of the licensed houses consisted of second-rate establishments—mere lodging-houses for the moral restraint of the insane. Their inmates are generally respectable tradesmen, or professional men of reduced means: occasionally, persons of considerable property are placed by considerate friends within their walls. The proprietor, if not himself a tradesman—either a retired victualler, gardener, or ambitious cobbler, as I have known to be the case—will probably be a member of the medical profession, who, from psychological zeal, broken health, or disinclination for more arduous professional pursuits, has applied himself to this calling. I cannot help thinking, if all proprietors were required to possess a medical education, it would be better for those consigned to their care. However this may be, it was seldom that men of great psychological talent, or otherwise highly gifted, were at the head of these establishments; indeed it is well when the medical officer, or superintendent, was not simply a puppet in the hands of an unscrupulous speculator, who really managed the asylum. From the consideration of these facts, a forcible argument can be deduced in favour of ameliorating the condition of middle-class patients, by placing them, at moderate charges, under the care of able men, qualified by education and experience, and chosen in virtue of their high attainments, for the discharge of this high function. The best method of effecting this object will next engage our attention. An establishment calculated for the reception of insane persons from the middle ranks of society, formed on a similar plan to that of a proprietary college, with working regulations, somewhat in the manner of our best public asylums; the whole invested in the hands of shareholders, or subscribers, who would govern by a committee of directors, having, as above stated, a resident medical superintendent, with

additional officers as in other institutions. Here is a step from the narrow despotism of an ignorant or unprincipled proprietor to the comparative freedom and wholesome management of a little republic. One individual mind would no longer be permitted to cramp the healthy working of the whole, nor to fetter, with jealous regulations, the energetic will of an earnest and devoted officer; but all may "work together for good," inspired by unanimous principles, and having one end in view. Indeed, I am of opinion that the plan here advocated, viz., a large proprietary institution, containing three or four hundred souls—not more, perhaps less—is the best, under certain conditions, that can be devised for the required purpose. In an asylum of this kind every guarantee must exist for the right treatment of its inmates: there can be no attempt at dishonesty, if the reports of its committees are duly submitted to public inspection; neither can inefficient medical aid be a hindrance or defect, if the managers take pains to select an officer of reputed acquirements in this department of his profession. And here I may take occasion to suggest an alteration in the titles affixed, in the present system of asylum government, to the principal officer of the institution. The term "Superintendent," though good enough in the days of leg-locks and keepers, seems hardly in accordance with the duties of one whose special province it is to

"Fetter strong madness in a silken thread—
Charm ache with air, and agony with words;"

and I have reason to believe it is indirectly repudiated by some of the most enlightened physicians in charge of public asylums. "Principal," or "Senior Medical Officer," is more in keeping with the views of the present day. The latter implies that another medical officer is resident in the house. With that liberality of sentiment characteristic of a learned profession, the second, or junior officer, may aptly be termed "Vice-Principal," or "House Surgeon." In very few asylums, the questionable title of "Medical Assistant" is assigned him, as though under any other name he would approach too near the dignity of the chief in command. The more general title of "Assistant Medical Officer" is, however, less objectionable. Some exception has been taken, I believe, to the name of "Matron," but it is difficult to find a better; perhaps that of "Mistress," or in some cases "Lady Superintendent," may be considered preferable: after all, it matters little—

"A rose by any name would smell as sweet."

Lastly, the appellation of "Steward" may advantageously be exchanged for "Manciple," as strictly in keeping with ancient

custom, and equally applicable to the duties of his office. I shall not venture further to sketch the outlines of a system such as now suggested, but will rather quote a striking and interesting account of an asylum, somewhat of this kind, in Flanders, taken from a review by the talented pen of Dr. Lockhart Robinson, in a late number of the "Asylum Journal":—

"It is an old and picturesque building, and part of it being castellated and constructed on a bridge which crosses the canal, it has the appearance of an ancient fortress. One side rises from a green turf bank on the water's edge, and the old dark, russet wall is partly covered with ivy, from which peep out the battlements crowning it. The gate is studded with nails, but scarcely in consequence of the present use of the house, as kind and gentle usage of the mental afflicted has here entirely superseded force and restraint. Nevertheless, there are upwards of three hundred *aliencés* in this house, under the superintendence of forty sisters. The patients are of three classes or grades in society. The most numerous is, of course, that of the *indigens*; next in number is that of the *bourgeoisie*, or middle class, who pay a moderate sum, and enjoy the advantage of semi-private apartments; and lastly, that of persons of family and fortune, who can, if they please, be accommodated with *salons, chambres à couches, and cabinets de toilette*, as elegant as anything to which they have been accustomed in their own luxurious abodes. Besides these divisions, there are special wards, padded rooms, and private gardens for those whose condition renders them dangerous and undesirable companions for the rest. The house is very extensive, and we were occupied a long time in merely walking over it. Above the cloister, which, as it were, lines the quadrangle, is an outer gallery, very prettily trellised and intertwined with creepers, serving both for ornament and security. There is an *aumônier*, and mass is said daily in the chapel, to which the inmates are allowed access at all times. . . . Of the lower class of patients, those who are sufficiently sane are employed in various ways in the *ménage*. A large number were employed in washing in the laundry. . . . Of the second class, about forty were manufacturing lace, and appeared perfectly rational; this lace is all sold for their own benefit, and the proceeds serve to supply them with such little *douceurs* as the charity cannot afford them. In another room, some were making clothes for their own wear, while parties of others were amusing themselves with cards or dominoes. Of the upper class, many remain in their own apartments, either from choice or because they are not fit to leave them; but about half-a-dozen were seated in an arbour formed in their own private garden, which is very tastefully laid out. One or two were engaged in fancy work, two were conversing apparently very rationally, and another was reading. A sister was with them. The Rev. Mother told me these were all *personnes de considération*. There is a common dining-room for these patients, where all who are not confined to their own apartments meet for meals, unless, as in some cases, they prefer solitude."*

* "Flemish Interiors." Longman. 1856.

However peculiar this picture may appear to our English eyes, there are many points therein shown which deserve our attention. I will say nothing of the laudable devotion of these Sisters of Mercy. Our own country has evinced her ability to send forth women no less distinguished for the highest attributes of their character as for every Christian virtue; and we may be sure if ever a hospital should be raised from the dwellings of those afflicted with the worst of human calamities—if it shall be proclaimed that the strong hand of woman must distinguish the treatment of the insane—then we shall witness a spectacle such as described in the passages above quoted, where religion, self-devotion, and heroism in common type, combine to render the weaker sex ministering angels of God. It must have occurred to those who entertain feelings of pity and sympathy for their poorer neighbours, that many, from inability to maintain a relative as they could wish for private treatment, are constrained to consign that beloved one, whether parent, husband, or child, to the wards of the county lunatic asylum, where he is left to struggle through the fell disease, associating with others below him in social standing, and who are not disposed to make allowance—if, poor souls, they could—for his sensitive or sorrowing mind. I have known some instances of this, where the affliction must cut, if possible, with a double edge—wounding the self-respect of the patient, who feels his degradation; being galling to the proper pride of his relatives, who for the first time become dependents on public charity. To meet this evil, I particularly uphold the system of proprietary asylums, as one under which those who are much above pauperism, and yet, from peculiar circumstances, are unable to bear the expense of a good private “retreat,” may be admitted to the advantages of skilful medical aid, with liberal and humane treatment, without the risk of losing caste, or suffering the additional pang which a pauper’s dress may entail. This will appear at first rather a difficult problem; let us see how it may best be solved. The simplest plan for affording accommodation to non-paying residents in any community, must evidently be by placing the burden of their support on the shoulders of the rest; and, in an establishment of the kind we are now considering, this could be easily managed by common foresight and judgment, in so arranging the scale of charges that a certain number, say five per cent., should receive themselves the gratuitous benefit of the institution. In course of time, we may reasonably expect charitable persons, governors and others, would bequeath sums of money for the purpose of endowing, by endowment, additional freeholds, as they may be deemed, to be filled by deserving cases, answering very much to the bursarships in our universities, by aid of which many a poor scholar has become a great man, and lived to bless the founder.

What an opportunity for the noble employment of wealth ! what ripe occasion for putting one's hand and seal to a life of good works, would such a scheme afford !—opportunity and occasion that many a dying man would grasp with joy, over whose tomb should be shed the grateful tears of the afflicted and destitute, to whom he had shown himself a brother and a friend. The middle class, when overtaken by insanity, is, as a rule, more to be pitied than the poor ; for the professional man must then exchange the comforts of his home, and the kind attention of friends, for the barren consolation of strangers and the discipline of a madhouse. Even where no real cruelty exists, there is too often the painful apprehension present, and the feelings of enforced subserviency to the *dictum* of a master whose humanity is suspected or questioned. On the other hand, the labouring man is removed from his squalid home of sorrow to a clean, well-kept asylum ; trained attendants, carefully watched, wait upon him ; full meals of well-cooked food are supplied him, and some degree of cheerfulness reigns around. While mixing with the rest, he has opportunities for forgetting, in part, his trouble. The social and domestic habits of this latter class are also very much in his favour. Accustomed to render obedience to the authority of their employers, the discipline of asylum government, rigorous though it may be, is no fresh trial ; and, moreover, habituated as the poor are to holding their griefs in common, it becomes a less difficult matter to find some among his new comrades who will listen to his tale of tears, than in the case of the better educated, more elevated member of society, who, from the common exclusive habits of our Saxon race, is little wont to make others companions to his distress, or to pour his complaints into the ears of strangers. Thus the latter is more isolated, and less disposed to forget his melancholy by mixing in the crowd ; while from his position, hard labour, as husbandry and other useful occupations, which can be rendered to a certain degree compulsory in a pauper asylum, must be mainly left to his natural taste or disposition. Therefore the position of the insane pauper, supposing him to rank rightly in the lower or labouring class, is in some respects essentially superior to that of the more educated man, especially if the latter has not the means of diverting his mind by those pastimes and indulgences which the affluent can alone enjoy. Here we see the want of suitable accommodation for the mentally afflicted in the middle class of society—a want, the pressing requirements of which are such, that neither time should be lost nor expense spared in removing the evil and reproach. It is time indeed that the middle classes should protect themselves from evils which by sufferance must increase. It is vain to wait while all around are bestirring themselves and girding on their armour ;

e luxurious tendencies of the wealthy are inducing their
 results, the natural appetites of the lower classes are
 g daily keener and less readily satisfied. Their intellects,
 ad by want, and a high-pressure system of education
 our fathers never dreamed of, must sooner or later
 hem in collision with those immediately above them.
 ndy the warning note has sounded; the slow upheaving of
 has excited general attention; and a safety-valve has been
 whereby the dangerous pressure on the condensed
 class will be for a while obviated or lessened. We
 ar everywhere of "middle class education;" the uni-
 t, those elderly maiden sisters who have so long guarded
 s of knowledge, begin to take alarm. Awaking, they ask,
 is this? What must we do? Vexatious and absurd regulations
 ve effectually barred the profession of arms from the
 poor gentlemen, seem now about to be removed; while the
 g out of our colonies, and the increased accommodation
 world, to speak metaphorically, must serve to relieve a
 us plethora throughout all branches of the community.
 r and still more forcible argument for the erection of
 tary asylums, in which the treatment of mental diseases
 e conducted on a system superior to any at present in
 will conclude this part of my subject. It is a fact, only
 l known to those who are conversant with the practice of
 y, that many cases which, by early and judicious treat-
 night have been restored to health, have, through neglect,
 untimely employment of remedies, degenerated into
 : mania and imbecility. This truth, which cannot be too
 disseminated, has again and again been brought forward
 w the penny-wise and pound-foolish policy of poor-law
 ans, who too frequently neglect placing a patient in the
 asylum till his malady has become confirmed, while by
 o the early symptoms, and with due treatment, the indi-
 might have been saved to his country and friends. But
 unces of this woeful or wilful negligence are occasionally
 t forward at the committees of public asylums, who can
 w many hundreds or thousands of private cases have, for
 f timely recognition and the adoption of prompt measures,
 irrecoverably lost? The desolate and empty mind, like
 ruined castle abandoned to decay, that once by the em-
 ent of common skill might have saved from destruction,
 , alas! too far gone. Never can architect's hand replace
 ilded capital; the ornate hall may never smile again.
 has not seen, and almost wept to view, that marvellous
 of creation, the human eye, marred by disease? The
 e and transparent cornea, through which has poured in

by-gone days visions of light and beauty, now clouded and dull; the inner chamber a wreck, like the *boudoir* of a palace with its mirrors broken, its tapestry torn, its costly graces dimmed; and this sad havoc from no sudden, fierce invasion of disease, nor the fatal injury of a moment, but slow, continued, prolonged, and perhaps *untreated because unrecognised*. Such has been the progress of events which have ended in total ruin. And thus with the mind: that wondrous web of fine-spun fibre which we term the brain, has received, unknown, and hence unheeded, a fatal strain; or, in the natural progress of disease throughout the system, it becomes the seat of mischief, though the nature of this change, at once subtle and mysterious, is not, I may almost say cannot, be known; but now events occur which, to the educated eye, bespeak the presence of disease—just as the foul tongue or accelerated pulse tell of a vitiated or feverish body, so the wandering eye, the failing memory, the muffled speech, tell of causes at work which may end only in death. But what if, by early treatment, the dread result be changed to life and health? What if disease be driven from its citadel, and forced to evacuate its hold? What, in short, if man has it in his power to turn nature backward, and to keep, for a season, death itself at bay? Is this nothing? Is it not rather everything? and should we not hasten to avail ourselves of the advantage which a timely interference will give us for quelling, perhaps for ever, the direst of human disorders? It is only by the early treatment of insanity that we can reasonably hope to effect a lasting cure: vain is our attempt to pull down what fell disease has reared, should we come late to the task. Here, as everywhere, we must begin in time. It is not the fault of medicine if the public, from mistaken motives of economy, or a desire to keep well in spite of their malady, refuse to seek medical relief till the hour for active treatment has passed. Too often the hapless patient lies prostrate under the shadow of the grim king, the physician meanwhile seeking in vain for aught but a *Euthanasia*. In diseases, so called, of the mind, this most pernicious delay often results from a wish to keep the poor sufferer at home, under the impression that if removed to an asylum his recovery may be indefinitely postponed; or from a conscious inability on the part of his friends to place him in skilful hands. Here the talent and resources of a first-class institution, with the moderate charge of an ordinary second-rate one, would afford no excuse, and probably none would be wanted, for delaying to begin the cure. Much more may be added to this argument to prove the moral obligations under which we all live, not only to assist, but also to provide for and against common disasters and affliction to which, as one family, we are liable; let it suffice, however, that

we bear in mind the consideration of our duties as neighbours, one to the other, and remember that in providing for the safety and well-being of others we provide for our own. A change is urgently required, and the sooner it is brought about the better for us all.

ART. V.—PATHOLOGY OF INSANITY.

BASED ON THE POST-MORTEM EXAMINATIONS IN BETHLEHEM HOSPITAL.

BY W. CHARLES HOOD, M.D.,
Resident Physician to Bethlehem Hospital.

(Continued from Vol. X. page 384.)

W. C., a male patient, died of paralysis, having been in the hospital two years and two months. On admission he was very thin and in a feeble state, owing, probably, to the small quantity of nourishment he had lately taken. His mental disease had then existed seven weeks, and was evinced by great taciturnity, especially in replying to any questions. When he did speak, it was only to describe various torments that he considered himself undergoing. Want of success in business, and impending poverty, appeared as the exciting cause, influenced by strong hereditary predisposition to insanity. For the first few days after admission he refused any food willingly, and for some time took little more than liquid diet; his obstinacy continued so long, that for upwards of a fortnight it was necessary to give him food by means of the stomach-pump. After this time he sank into a state of complete *melancholia attonita*, rarely speaking, but occasionally giving evidence that he understood what was said to him, and was conscious of passing events; appetite and willingness for food returned, and he would remain for hours sitting up in bed, reading page after page of any book that was given to him, perfectly unconscious of what he was reading. His symptoms varied very little during a protracted illness; weakness gradually increased, paralysis ultimately overtook him, and he died helpless in body and childish in mind.

Autopsy.—All the bloodvessels, both of the membranes and brain, extremely turgid. Slight partial opacity of the arachnoid on the convexities of the cerebral hemispheres. Serous infiltration of the pia mater, and much fluid in the basis of the skull, after removal of the brain. Lateral ventricles of the brain distended with clear fluid, estimated at two ounces in each.

The right lung uniformly and firmly adherent, so that it was torn through in drawing out the contents of the thorax; a few very hard small bodies were scattered irregularly through it, and

some cavities, not larger than small peas, with loose chalky matter, were discovered, but the lung was otherwise healthy and pervious to air throughout.

The left lung was healthy, and firmly adherent at its posterior aspect.

The pericardium was universally and closely adherent to the heart, the connexion being obviously of ancient date. During two years of this patient's residence in the hospital no peculiarity had been noticed in his pulse, nor any symptoms referable to the heart, which in structure was perfectly healthy.

The liver was soft, so that the substance yielded readily to the pressure of the finger.

The middle portion of the colon (transverse arch), was nearly twice its usual length, bending down after the hepatic flexure to the pubes, and then ascending to the left hypochondrium. (This peculiarity has been observed in a few other instances in the Bethlehem examinations.) The colon was greatly distended with flatus, except in its ascending portion. The body generally well nourished; there was much fat in the omentum and about the abdominal viscera, and a stratum of an inch deep under the integuments of the abdomen.

M. C., a female patient, died of gradual exhaustion, after a residence in the hospital of thirty-one years. Until the year 1854, (twenty-nine years after admission,) this patient was the subject of recurrent mania, having periods of excitement and violence, followed by seasons of depression, the mania quickly succeeding the melancholia, without any lucid interval. During the last two years of her life the maniacal symptoms were constant, and she died, the excitement and irritation peculiar to that stage, yielding only to physical exhaustion.

Autopsy.—Great general emaciation. The external vessels of the head empty; the internal turgid. Slight serous infiltration of the pia mater. The lateral ventricles enlarged, and containing each not less than an ounce of fluid. Much fluid about the velum and pineal gland. No morbid change was observed in the substance of the brain.

Both lungs connected to the thoracic parietes by old strong adhesions of considerable extent; they were both somewhat congested and thickened in their posterior aspect, from long continuance in the recumbent position, but not otherwise diseased. The heart was healthy. No other change was observed in the abdominal viscera.

G. G., a female patient, died of phthisis pulmonalis, aged 62, after residing in the hospital thirty-three years. Her occupation had been that of a milliner. Her symptoms were maniacal, and she was under the influence of many delusions, principally of an

extravagant character, inducing her to expect court and attention from her fellow-patients and the officials of the hospital. The physical disease which caused her death was severe in its character, but of short duration; the delusions and mental peculiarities remaining unaltered to the last moment of her life.

Autopsy.—Skull-cap thin and devoid of blood; considerable quantity of clear fluid escaped on its removal. The substance of the brain soft; an entire absence of bloody points. The lateral ventricles contained about two ounces of serous fluid.

Left lung small, and much compressed by a spinal curvature; the structure of the lung healthy. Apex of the right lung completely altered by the substitution of a tubercular mass for the healthy substance, and throughout the other portion of the lung tubercular deposits were scattered. Heart apparently healthy. No disease observed in the abdominal viscera.

C. H., a male patient, died of general paralysis, aged 27, after thirteen months' residence in the hospital. By occupation, a jockey and horse trainer, he had been exposed to, and indulged in excesses of almost every description; an easy temper and naturally weak intellect offering little opposition to temptation. On admission, evident symptoms existed of approaching general paralysis, although they were not sufficiently stamped to render him ineligible by the rules of the hospital. The disease quickly showed itself, advancing rapidly stage by stage in the following order: Irritability; tremor of the upper lip and edges of the tongue; unsteadiness in gait and articulation; mental excitement and extravagant conversation; delusions connected with personal power and possessions; loss of memory; inattention to habits of cleanliness and self-respect; perfect dementia and death.

Autopsy.—General emaciation of the frame, with entire absence of fat in the thorax and abdomen. Little blood in either the external or internal vessels of the head. General thickening of the arachnoid, with infiltration of the subjacent tissue over the entire convexity of both cerebral hemispheres. The substance of the pia mater was filled with fluid, like a sponge; this membrane adhered so closely that, in detaching it, portions of the grey substance were torn away in several places. Between two and three ounces of perfectly limpid fluid in the two lateral ventricles. Vascular congestion, with partial solidification to an extent not very considerable, at the posterior aspect of both lungs.

The heart small, not containing much blood. No morbid appearance in the abdomen.

L. D., a female criminal patient, died, aged 66, of exhaustion and the effects of age, after a residence in the hospital of thirty-three years.

This woman was tried at Worcester for the crime of infanticide, and acquitted on the ground of insanity. During her prolonged residence in the hospital she was, with two exceptions, uniformly cheerful, and endeavoured to make herself and those around her comfortable. During these two exceptional periods she suffered from melancholia and attempted suicide, each attack being preceded by febrile excitement. A short time previous to her death she again became melancholic and restless; her mental symptoms appeared not only to be influenced, but much aggravated, by the physical weakness attending age, and in this state she sank and died.

Autopsy.—The skull-cap of compact bony substance, heavy and rather thick. The internal vessels both of the brain and membranes congested. A convulsion of the posterior lobe of the left hemisphere shrunk so as to leave a vacuity of an inch in length by half an inch wide, occupied by serous infiltration of the pia mater. A similar effect in less degree in two or three other situations. Slight general infiltration of the pia mater. The lateral ventricles distended with limpid fluid, at least half an ounce in each.

Slight adhesion of the left lung, with partial consolidation to a small extent of the inferior lobe at its posterior part. The pleura covering the part thus consolidated covered by an effusion of soft slightly adherent fibrin. Two or three small bits of similar consolidation at the back of the right lung, which was not adherent. In the rest of their substance both lungs were healthy. No morbid appearances observed in the abdomen.

M. A. J., a female patient, died of general anasarca and disease of the heart, after seventeen years' residence. She was married, and the mother of three children. When first admitted she was in good bodily health, but under perpetual morbid fear of being murdered. Very restless at night, and fretful during the day. She ultimately became more maniacal, was subject to sudden outbursts of passion and violence, at the same time occasionally (as if induced by fear) she started off to escape some imaginary persecutors. Her conduct was generally childish, and at all times she showed great disinclination to occupy herself. Her conversation was frequently very obscene, and always devoid of any intelligence. Until two years before her death her general health was good; after that time she suffered much from dyspnoea and all the complications of diseased heart. Her mind became gradually more and more imbecile, and she died in a comatose state, though not much more intellectually lost than she had been for many months.

Autopsy.—The body not emaciated; there was a moderate share of fat under the integuments, as well as about the viscera.

All the bloodvessels of the brain and membranes extremely turgid. The two cerebral hemispheres presented a remarkable contrast in external appearance. The convolutions of the left were completely flattened by internal pressure, and the pia mater was throughout of a dull pink colour, from intense vascular congestion. Excepting slight infiltration of the pia mater with a clear fluid of a yellowish tint and fulness of vessels, the corresponding parts of the right side were in a natural state. The cerebral substance on the lower lateral and under part of both posterior lobes was extensively and deeply disorganized, this change nearly reaching to the lateral ventricle. It was softened, partially broken down, and mixed with small portions of coagula, yielding to the slightest pressure. The vessels of the surrounding medullary substance were injected to the utmost, and this substance presented in the posterior lobe a slight brownish-yellow discoloration. The bulk of the right hemisphere had been so increased, that the right ventricle was pushed over to the left of the middle line of the skull.

There were old adhesions of both lungs, but no recent disease.

The heart was large and distended with blood; there was some thickening and induration of the left auriculo-ventricular valve, but not such as to interfere with the circulation.

The kidneys were slightly granulated, with partial thickening and adhesion of the capsule. No other morbid appearance was noticed in the abdomen.

J. S., a male criminal patient, admitted in the year 1830, having been tried at the Central Criminal Court for discharging a loaded pistol at one of his Majesty's subjects, and then acquitted on the ground of insanity. The first symptom of insanity was noticed during a sea voyage six months previously, when he ordered the captain to turn the ship round or they would be lost, he having seen a man in the sun who had given him the counsel. On his return to England he threatened his uncle's life, while under temporary mental irritation and vexation. He was afterwards taken into custody at the entrance to the House of Lords, where he had waited three days, with a loaded pistol and a knife concealed in his sleeve, for the purpose of assassinating the late Duke of Wellington. For many years before his death he considered himself a prophet, and foretold plagues and earthquakes, as God's revenge for his incarceration. His conduct was generally good, and while he maintained the delusions with great pertinacity, he was never unwilling to listen to the arguments of others. He was very anxious for liberty, and though still maintaining his character as prophet, he nevertheless, on the death of the late Duke, sued for his discharge, considering that his crime was expiated. His mental state altered but little during his

sixteen years' confinement, when he died of general dropsy, following disease of the liver.

Autopsy.—Great general emaciation; the fat had entirely disappeared from the thoracic and abdominal regions. No morbid appearances were noticed in the contents of the cranium.

Partial firm adhesion of the left lung. Considerable but not general tuberculation of the upper and back part of this lung, with a vomica of moderate size. The right lung was healthy, and not adherent. The heart healthy. Immense enlargement of the liver, which was at the same time very heavy. It descended below the cartilaginous margin of the chest, nearly filling the left hypochondrium, and pushed the diaphragm upwards, encroaching so much on the chest that the lungs did not collapse when the pleuræ were opened. This increase of size was caused by the deposition throughout the organ of adventitious masses, varying in size from that of a small pea to a diameter of three or four inches, generally of circular figure, immediately surrounded and continuous with healthy hepatic structure, without any intervening capsule. They were firm, and of whitish colour, and of nearly homogeneous substance; they were flattened on the surface of the liver, and the smaller resembled in colour and consistence the secondary deposits in the liver in cases of cancer. Some absorbent glands near the pancreas, and in two or three other situations, were discovered similarly enlarged. There were numerous hard flattish tubercles, not large, in the great omentum, and still smaller ones in the peritoneum, at the lower part of the abdomen. The hepatic substance connecting the morbid deposits was healthy, and of dark colour from vascular turgescence. It was considerably less in quantity than the amount of the morbid growths. The gall-bladder was moderately full of healthy bile. The abdomen contained dropsical fluid of strong bilious tinge, and the skin was of the same colour. Several ulcers in the cœcum and neighbouring part of the colon. Incipient granular degeneration of the kidneys, with partial adhesion of the capsules.

(To be continued.)

ART. VI.—INTEMPERANCE CONSIDERED AS A FORM OF MENTAL DISORDER.

THERE cannot be a more fertile subject for the student of psychology than to elucidate the direct and indirect consequences of intemperance, not only for its ravages on the vital organs generally, but for its special injurious effects on the mental faculties, and as a predisposing cause of many forms of insanity.

We shall examine some of the facts to prove that excessive intemperance tends, not only to injure those who indulge in this habit, but that it also affects their offspring, occasioning an excessive craving in them for the gratification of similar tastes, which is often so irresistible as to constitute a special form of disease.

It is, therefore, essential to trace the *modus operandi* of alcoholic poison on the system, which induces, besides the above consequences, many forms of moral depravity.

This latter view is obvious by an inspection of our jails and workhouses, which present ample proof of its devastating effects on the higher attributes of man; and our infirmaries and hospitals will furnish indubitable evidence that it predisposes to many forms of corporeal disease; whilst our county lunatic asylums present many lamentable cases of mental affections induced by excessive intemperance.

Lastly, it is now a well-established fact, that all those abnormal conditions are transmitted as heirlooms by inebriates to their unfortunate children.

In one short paper we can give little more than a mere outline of the subject, but yet sufficient to show that the evils which will be enumerated are not exaggerated for any special purpose. They are patent to every observer, and demand not only the sympathy of philanthropic men, but some effort to prevent their continuation. Finally, we shall submit a few reflections, in order to show how this result may be accomplished by means similar to those made use of to cure various mental affections.

So that for our purpose there is not needed any novel treatment or startling new views. The inferences will be deduced from the premises, and may therefore be regarded as simply consistent; for, prior to submitting our deductions, we shall endeavour to prove that *drunkenness* in some of its forms should be treated as a type of insanity, and that in all inveterate cases the victims should be regarded as patients to be placed under restraint, and forcibly prevented from continuing their debased habits!

It will be acknowledged that intemperance is a leveller! All its votaries, whether illiterate or learned, rich or poor, are brought down to the same low moral condition. And just for this reason, it acts on the mind through the organization in general, and the brain in particular. And if we select an example of one highly cultivated, we have the advantage of his experience of its mind-destroying tendency. Its continued excess and the fatal consequences are thus graphically described:—

“till the brain became
In its own eddy boiling, and o’erwrought,
A whirling gulph of phantasy and flame.”

The effects on a worshipper of this modern Moloch is unmistakable havoc. He is rendered abject and reckless, and qualified for deeds of violence; daily he is rendered more savage and infuriated, and becomes desperate and dangerous even to his habitual associates. His criminal outrages are perpetrated under a certain amount of excitement, but he abstains from great excess until he has performed his immoral ravages, and then "he drinks deep," and "steeps his senses in forgetfulness." He is, under such circumstances, impotent to act; his expression is then most idiotic, his appearance desolate, and if he attempts to move, he is in danger of claspings his kindred clod, and presents a being of such disfigured form, as if he had lost every trait of humanity. And in verity it is difficult to believe one so uneducated and so brutalized had ever felt the pure and refined emotions arising from moral perceptions; or that he had ever experienced the love of the beautiful and the true, by contemplating the works of creation. We shudder at beholding the mental degradation of an immortal agent, and we come to the conclusion that Government, in its paternal character, is bound to use means to prevent the great mass of the working population becoming similar to the sketch we have made of one slave to intemperance, with its necessary concomitant, crime! Intemperance is indeed a giant vice, and requires commensurate means to prevent its spreading,—means only possessed by the rulers of the country; and if they neglect their duty, let them not imagine that even the most innocent, pure, and holy will not suffer from the malignant consequences thus unrestrained; and rendered liable, whatever their station, to be injured in the midst of such a vortex of ruin.

It so corrupts, that servants sacrifice their integrity to it, and violate the misplaced confidence of their employers; and it pollutes the minds of women, that nurse-maids may corrupt the innocent beings under their charge.

So that even as individuals we dare not remain unconcerned spectators; we must combine to stop the torrent of evils which are more devastating than pestilence and plague. We pity the obtuseness of those who consider that, although it may be the source of some crimes, the revenue could not dispense with the sale of that which induces intemperance. Verily they have eyes and see not, ears, and hear not; for the injuries to life and property are more than commensurate to the monetary advantages, and that, if it were possible to prevent altogether the sale of alcoholic compounds, there would be a vast amount of property saved, besides the absolute millions sacrificed for their purchase. And in these advantages we have not added that there would be prevented a number of bad husbands, fathers,

mothers, wives, sons, and daughters, which are made by intemperance, and if a list of them could be annually exposed to public gaze it might startle and probably deter some few of the novitiates of this fearful habit. Adding to these brief facts the searing effects of intemperance, and that its tendency is "to drain every drop of the milk of human kindness" from the hearts of its votaries, and then leave them steeped and saturated with extreme and inveterate selfishness, which is confirmed at every session for the trial of criminals.

These are simple truisms, for inebriating stimulants damage the organization, render the moral sentiments callous, and prostrates the God-like attribute of reason, often driving its worshippers to madness or murder!

There requires little reasoning to explain why such must be the ultimate results, as the primary effect of alcohol is to increase the circulation of the blood; in the first stage brightening the eyes, and exciting symptoms of greater vivacity, as the mental faculties become stimulated. If the doses are continued, there is soon manifested a vast change in the expression—the eyes become slightly injected, the face flushed, the mouth hot and dry, the body feverish, and the brain congested. This latter state is indicated by a sense of heaviness and stupor. If, despite these warnings, additional draughts are quaffed, the individual is in that ominous condition approximating to actual disease.

We shall, after these general statements, submit some few particulars under the following heads:—

1. The physical and moral ravages of intemperance.
2. The intellectual lesions.
3. That the inordinate craving for alcohol is an hereditary affection.
4. That drunkenness must be regarded as itself a form of insanity, irrespective of delirium tremens.
5. Concluding reflections.

It is well known that the stomach of the drunkard suffers from the effect of his excesses, and that its functions are much impaired, so that it can ill perform its allotted task.

The proof of all these effects is graphically expressed in the countenance; for the inebriate either looks very pale and pasty, or else bloated with an accumulation of diseased fat. In the latter case, the slightest scratch, which would be unheeded by a healthy man, will often induce mortification and death.

But if the drunkard does not become unworldly, then he has a cadaverous expression, with, at times, feverish and hectic symptoms. The intemperate are also liable to affections of the liver, bladder, kidneys, and so forth; and he pays the penalty of his

excesses by all the complications of dyspepsia, and by having to endure the racking, gnawing pains of gout.

Besides these diseased conditions, the thoracic organs are implicated. The heart or its valves may become ossified, or it may lose its contractile power in some degree, producing many distressing consequences; and if the inebriate has inherited weak lungs, his career may be cut short by rapidly developed consumption.* It is patent to every practitioner that the tendencies of these diseased organs may be transmitted to the children of the intemperate besides the other affections to which we shall subsequently allude.

These brief statements will suffice our present purpose, as we merely wished to indicate that intemperance, among its other evils, deranges the whole of the chylipoietic viscera, involving the organic functions. It also disfigures the outward form, but this latter is of less consequence than the changes induced by this vice on the inner life of the individual.

Before we treat on this important part of our subject, we must call attention to the fact, that the fatal habit of intemperance injures the nervous system generally, and the brain in particular.

A vast many of the patients attending the ophthalmic institutions are either drunkards or their children, and the disorders they suffer are, inflammation of the eyes, amaurosis, and very often loss of sight. Many also suffer from deafness and the absolute loss of the senses of *taste* and *smell*.

Writers on the deaf mutes attribute the affection to intemperance as one of the causes. And it also induces paralysis, epilepsy, and apoplexy.

Whilst the brain gives surety of its functional disturbance in delirium tremens, which specially is induced by intemperance, in this affection the victim sees the most frightful objects mocking him, or threatening him with ribald jests or horrid denunciations, and often exciting in him a sense of terror from their demoniac expressions.

We will only cite one case as an instance that, after the active attack, the hallucination still, at times, annoyed and irritated the individual.

Mr. R—— was a drinker of brandy to great excess, and although a man of great talent, he had lost all moral control over himself. During one of his attacks of delirium tremens, instead of threatening creditors stunning him with their demands, he fancied that a large black raven was pecking at his right shoulder.

* Drunkards who have scrofula transmit this dreadful disease in an aggravated form; whilst they are also liable to jaundice and fits of melancholy depression, which, when inherited, is a predisposing cause of suicide.

This made him rave and swear most frightfully. He, however, recovered from the attack, and resumed his daily potations; and when he had imbibed a certain dose, the old black raven would again annoy him. As he was a public man we often saw him, and frequently noticed that in the midst of an intellectual discourse he would turn his head abruptly towards the right shoulder, and say in a half smothered oath, "Be still; be quiet, will you?"

So, one day we asked his man, why Mr. R—— did so? "Why sir, don't you know that he still thinks his old enemy, the black raven, is pecking at his shoulder; but he is never troubled with this fancy until he is nearly drunk; and," he continued, "it takes a rare quantity of brandy before he is so."

He died in the prime of life, suffering in the most fearful manner, bodily and mentally.

But before this lamentable malady takes place, the inebriate is forewarned by some abnormal state of some of the external senses.

These latter statements we could verify by many instructive cases; we select the following:—

Mr. M—— was a most inveterate drinker from his youth, but was mild and gentlemanly when sober, and full of regret at the madness of his career; and yet he continued this suicidal habit.

About a year after we had seen him he complained of an absolute loss of his *smell* and *taste*, and was strongly urged to abstain from all intoxicating beverages. He made a powerful effort to do so, and partially recovered his lost senses. But real or fancied annoyance made him relapse, and then he was unable to distinguish the most fragrant from the most foetid substances. And yet, so enslaved had he become to his fatal habit, that he continued to indulge in excess, to use his own apology, "to prevent the irritation he experienced, by stupifying his thoughts." And this he continued to do until active disease of the brain took place, and after repeated attacks he died of delirium tremens.

The next case we will submit, from its "pointing a moral," if it will not "adorn a tale," might have terminated similarly, if the poor inebriate had not been cut off in his career rather prematurely by a most unfortunate accident.

Mr. B—— had been in business as a respectable retail druggist, at —, and was said to have been intemperate as a young man, but for some years after his marriage he restrained the strong propensity; yet from some circumstance we are unacquainted with he began his old course, and soon became an inveterate

drunkard. All his stock and furniture were disposed of to gratify his inordinate craving, and his wife and children were reduced to poverty.

The ravages he committed on himself were written in red and blue blotches on his face and nose, but these were trifling to his absolute loss of both *smell* and *taste*; still he might be seen reeling about the streets whenever he could procure money for drink.

When most degraded in mind and body he was urged, in a moment of sobriety, to take the temperance pledge, and he soon recovered some more natural expression, and a little feeling of renewed respectability; but he was still deprived of *smell* and *taste*.

A situation was procured for him at the house of a respectable firm of wholesale druggists, in what we believe is called the DRY department. Yet, with all his past experience, there still lurked a craving for a more potent stimulus than coffee or tea, and so he was easily persuaded to break his pledge.

All kinds of alcoholic beverages were excluded by the firm from their establishment. Yet this salutary order was evaded, and spirits or porter were procured in medicine bottles. This evasion cost the life of an individual. Poor B—— had clubbed for some porter, and during the time it was sent for a bottle of laudanum had been placed on his counter, to be enclosed in a parcel he had to pack. This bottle he mistook for the forbidden porter, and took a hearty draught of it, and immediately recognised by his sensations the fatal mistake. A stomach-pump was instantly procured, and every effort which science or humanity could apply to save him was tried, but all proved useless, and, if our memory is correct, he died within half an hour!

As he had not recovered his *smell* or *taste*, and had recommenced his former intemperance, there is little doubt but that he would have ultimately been carried off by some form of cerebral disease.*

We will now briefly advert to some effects of intemperance on the moral perceptions.

It is proverbial "that fools and drunkards betray their natural tendencies;" for they cannot conceal their follies or their vices.

If the inebriate is naturally of an irritable temper, he is sure to quarrel under the influence of drink. If he is sly and cunning, he will become suspicious and spiteful, and often very mischievous. Pot-companions have frequent brawls; and the friendship of drinking associates is held on a very slight tenure. Look at the

* These two cases will assume an importance in our elucidation of the organs implicated in the hereditary intemperance, and if our views are rejected it would be impossible to explain how a craving for intoxicating drinks can exist when the drinker had neither *smell* nor *taste*!

violated confidence; the adultery; manslaughter; the breaches of commercial faith, even amongst the comparatively educated;* also the wife-beating and other brutalities among the working-classes; and thefts, burglaries, murders, rape, and so forth, among the degraded portion of the community—those who are without any culture of their mental faculties. And thus we possess a mass of evidence, amounting to actual proof, that intemperance merely rouses into frightful activity the lowest of human propensities.

This is confirmed by the fact, that it is rarely the case that drunkards are chaste and highly moral in their conversation and actions.

It is therefore a natural consequence that intemperance should more or less affect the brain, and induce many forms of insanity. This is a valid reason to avoid the temptation and the penalty; yet it is a lamentable fact, that those who become addicted to this debasing habit cannot be deterred from it by the most urgent appeals to their better nature, and the most startling narratives of the diseases it induces. To such infatuated beings, it is most true that—

“Every charm of gentler eloquences
All perishable—like the electric fire—
But strike the frame, and as it strikes, expire!”

We shall, at the conclusion of this essay, submit some reasons for the use of other means than either precepts or arguments, to stem the frightfully increasing evil of intemperance.

We have, therefore, the most voluminous evidence that apoplexy and delirium tremens are not the only affections consequent on the baneful vice of inebriation; that it is not only destructive to the physical and moral health, but that it also prevents intellectual development.

The following case corroborates this statement:—In the town of B—, in Suffolk, there resided a married pair, who lived on a small independence. They were near relations, and were reported to be not very remarkable for great intellectuality; and from their mode of life it would seem they did not use what little they had. They rather preferred gratifying their animal propensities, and miserable were the consequences. “Their usual occupation,” says our informant, “consisted in muddling their brains with vinous potations, probably never getting absolutely intoxicated, but in that state usually designated ‘fuddled.’ In this condition they retired every night, and the results of their depraved habits soon became manifest. They had five children,

* We do not regard any one educated if the moral attributes are left untrained, and therefore not manifesting any influence on the character and conduct.

all of whom were of the worst class of idiots; that is, not only defective in intellectual capacity, but they also inherited from their progenitors the animal propensities with an intensity of power.

Similar examples are patent to every physician, for intemperance produces its havoc as a mind-destroyer in all places. Look, for instance, at the squalid groups lounging at the "gin-palaces" in this metropolis and in all large towns; and mothers may be seen (O profanation to this sacred name!) standing or reeling with their weak, sickly, and emaciated children, many of them, from want and neglect, staring in vacant idiocy.

But the most startling problem connected with intemperance is, that not only does it affect the health, morals, and intelligence of the offspring of its votaries, *but they also inherit the fatal tendency and feel a craving for the very beverages which have acted as poisons on their system from the commencement of their being!*

The first time this aspect of the subject was forced on our attention we had become acquainted with persons in respectable positions of society who would break out for a week or so, and during the time would continue to drink to great excess, after which they would remain for some lengthened period rigidly sober.

We at first attributed the latter phase as the consequence of the nausea and derangement of the system, but we soon had a mass of evidence which, in a great measure, rendered this inference invalid; for we noticed that the alternate inebriety and abstinence assumed a regular periodicity.

We also met with cases which confirmed our first impression, as to the tendency being transmitted "from sire to son." Two remarkable instances were related in a public assembly. Two respectable men, members of two different denominations of religion, had made the discovery in their youth that they experienced an irresistible craving for alcoholic liquors, but that they could not taste them without continuing to drink until they became inebriated. They were men of good sense, and very moral, and they determined to act on their higher motives, and abstain altogether from the use of these fatal beverages. This they did many years before the evils of intemperance had induced men to form societies for its suppression.

These two rational reformers continued water drinkers for many years; but both were induced, on some special occasion, to taste "the forbidden beverages," and each is reported to have had some misgiving as to the danger and hazard of the experiment, but they were overruled, and yielded to the fatal tempta-

tion. For it seems the moment they drank all their long-smothered latent craving was revived with fearful intensity, and both, on the first occasion, became intoxicated; and then they continued their old course, and both ultimately died in mad-houses, no doubt expedited by the remembrance of their long-sustained victory over this vicious tendency, and the weakness and degradation of ultimately being vanquished by it.

From similar well-authenticated facts, we were induced to believe that drunkenness, like many other morbid affections, is hereditary; and then we naturally sought for a solution—How is this tendency transmitted?

Before submitting some of the evidence in our possession, by which both questions may be answered, we may premise that all the animal functions are under the directing influence of the brain; that, for instance, the cerebellum conserves the sexual functions, and that all the feelings and sentiments, included under what are termed “the affective faculties,” are located in the cerebrum. We merely insist on this induction to strengthen the *data* for the following elucidation.

That in order, for example, to comprehend how the tendency of intemperance exists, we must avail ourselves of the assumed fact, that a portion of the brain gives man “a desire for food and drink,” so that these essentials for his health may not be left to accident. Spurgeheim called this organ “Alimentiveness;” whilst other writers term it “Gustativeness,” or “Instinct of hunger and thirst.” And it will be by the physiological evidence of this function that we are enabled to explain and answer both queries.

Nay, we will affirm that, if we reject the evidence for the existence of such an instinct, though the facts of this craving for intoxicating drinks be admitted, it could never be explained. We might say that it was very curious, or very mysterious, and endeavour to invent some ingenious speculation to account for it; yet it would be, under such treatment, a tangled web of mere gratuitous assumption, or unsupported ambiguities.* The desire for food and drink are appetites possessed by all animals; and there is a periodical demand for both, to keep the body in a state of working order. Observations, often repeated, enable us to point out the locality of the organ of *alimentiveness*, it being

* This was just the dilemma in which the late highly-gifted Sir Charles Bell was placed in his “Bridgewater Treatise on the Hand.” He could not reconcile the great mechanical tact of man to have been bestowed on him merely by the hand, and so he had to admit “that there must be some portion of the brain destined to give him his manual dexterity;” and this portion of the cerebrum he called “*The Muscular Sense*,” all of which ingenuity he would have been spared had he admitted “The Organ of Constructiveness,” which is said to be more or less developed in the ratio of the manipulative power.

situated at the base of the brain, and occupies the temporal fossa on each side of the head. It gives origin to the olfactory nerves. When the organ is large, there is great width at the lower part of the skull, just at the temples, and above the zygomatic arches. This may be verified by the inspection of all voracious animals, such as the lion, tiger, pig, and so forth.

The same parts of the head are generally very full in gluttons and drunkards, but they are narrow in persons who have perfect control over their appetites.

As presumptive evidence of such an instinct, it may be affirmed that the stomach does not select food or indicate any preference, and, although it is often a very ill-used organ, and greatly imposed on, it has but one remedy—it can reject the superabundant supply.

In a state of nature man and animals would, as a general rule, select the sort of food most suited for them, by the sense of smell, but the stomach is, and would be, a mere passive recipient.

But still it might be said, supposing these statements to be correct, they furnish no positive evidence that the selection of nutriment is the province and prerogative of *alimentiveness*.

We might content ourselves with simply answering that the two cases of the absolute loss of the senses of *smell* and *taste*, and the continued craving for what could not gratify by the flavour or the odour, must have been excited by the remembered instinct which had set up some preferences, not from tradition, but from the primary gratification these drinks imparted in the commencement of their career.

We, however, submit another kind of evidence, and which gives a complete answer by fair induction.

1. That *alimentiveness* indicates a regular periodicity.
2. This is proved by the fact that whatever may occupy the mind of an individual, he is apprised of his meal-time, by an urgent desire for food.
3. That this periodical craving cannot originate in the stomach itself, for should any casualty prevent food to be eaten, there is little or no inclination to eat.
4. If, therefore, the periodical instinctive desire for food depended on the stomach, as it remains empty, the desire would be indefinitely persisted in. But as this is not the case, we are forced to conclude that *alimentiveness* is the "Master of the Ceremonies."
5. It should also be remembered that the desire to eat may be induced by savoury smells, which, affecting the olfactories, the excitement is transmitted to the organ of *alimentiveness*,

and thus the craving is so great, that a keen appetite is experienced.

Lastly. We are, from these premises, warranted to conclude that the stomach does not induce the desire (as inferred from the fact mentioned); and further, when the next meal-time arrives, there will be experienced again a great desire for food. We might add other well-ascertained facts—that, for instance, insane patients who try to starve themselves have moderate *alimentiveness*; whilst criminals left for execution will, when this organ is large, be very eager for their last breakfast, and enjoy it with as much *gusto* as if nothing unpleasant was anticipated.

The inordinate exercise of any feeling or instinct induces not only greater activity, but also greater intensity of power.*

We therefore shall submit evidence that a craving for inebriating liquors becomes, from this circumstance, an hereditary affection; just as in the same manner when individuals exercise certain of the perceptive powers the tendency is transmitted, and hence there are families of mechanicians, painters, sculptors, &c.

We have already mentioned—and only repeat it now as affording collateral proof—that the base of the brain is the seat of the animal propensities, and that our passions are stimulated by strong drinks; for they excite the heart's action, and the blood is propelled with an accelerated force to the brain generally, and to the base of the brain in particular, where are situated the largest blood-vessels—so there is not any marvel that the feelings are roused, whilst the more remotely situated powers are scarcely affected. And hence the habitually intemperate do not manifest any high and exalted sentiments; recklessness takes the place of prudence, and every pure affection is trampled on and outraged. And although the inebriate is at times conscious of the destructive and searing influence of his debased habit, he seems like one spell-bound, and if he has not inherited this horrid insanity, he is sure to transmit it to his family.

Mr. J—— was a professor of religion, but the truths he inculcated were rendered useless by his own intemperate habits. His children received them with mockery from their heavy-tongued and scarcely articulate father. Morality taught by him acted as a few drops of water on a dry and barren ground, and excited the ridicule and not the reverence of his hearers. But he never was seen reeling drunk—only constantly kept up to the point of saturation. He was cut off in the prime of life.

* We have numerous instructive facts in reference to the instinct of *alimentiveness* in cases of gluttony, both in persons reputed intelligent, and those who were idiotic or insane, and many curious *idiosyncrasies*. These we may on some future occasion be disposed to prepare for this Journal; there are many psychological phenomena connected with the subject.

His wife had a similar tendency; she had a very bad "stomach complaint," and she took spirit as a balm; and she imbibed it so continually, that scandal affirmed "she liked the medicine."

Was it therefore any wonder that all the younger J—— became drunkards?

We would not use this case as furnishing proof of the hereditary tendency of drunkenness, as it might be referred by some to the children having been educated to drink. But we knew some of the family, who were witty, intelligent, and most excellent companions, being chided for their suicidal conduct, say, "We can't help it; we inherit a strong love for rum or gin!" One actually bound himself by some heavy penalty, and after some months' abstinence, broke out and declared "The craving was actual torture—he could not help himself."

The mother died a confirmed drunkard, and so did every one of her children.

Mr. B——, of —, Yorkshire, had also a large family, but he and his wife were never exactly sober. Soon after we knew them, the lady died suddenly, as it was reported, of a fever, but in fact from an attack of delirium tremens; and a few hours before the affection came on, an empty brandy bottle was found under her pillow.

The old man had an iron constitution, and stood for some years the havoc of this searing vice; but he lived long enough to witness the sad effects on his family. His eldest son, under the influence of alcohol, committed suicide, and all the other children (with one exception) came to an untimely end, all being inveterate drunkards; but the final blow to the poor old sinner was struck by his only daughter, as she was brought home by the police in a state of inebriety. This shock was too much, and he did not survive it.

We could narrate a vast many cases, some of literary and professional men, who, in answer to our query whether they had a strong craving for intemperance in drink (judging so from their large alimentiveness), have either confessed themselves the slaves of this propensity, or, to avoid the baneful consequences, have shrunk from the temptation; "for," said one, "if I drink at all, I cannot help going on to maddening excess—and my father was so before me!"

In a Journal devoted to investigate the phases of insanity, we need not insist on the fact that literally "the sins of the fathers (physical and moral) are visited on the children;" and we also affirm that the drunkard's propensity is also transmitted to them through some morbid condition of the alimentive organ.

We possess a large mass of evidence in proof of this statement.

as valid as that the brain, heart, lungs, stomach, bladder, and kidneys are implicated under long-continued acts of intemperance.

When once this vice assumes a mastery, the slavery to it is most humiliating. There is only one chance of curing this form of disease in its incipient stage—to warn the victim that he stands on a precipice which is full of danger, and that, if he has not destroyed his intellect, he will make an effort to save himself from the imminent consequences. That if he does not make this effort from a high moral motive, he should pause ere he drags to certain destruction the innocent and helpless beings whom he has been instrumental to usher into existence, and which it is his sacred duty to cherish and train, that they may be fitted to perform their parts on the busy stage of life.

He might be told that, instead of being selfishly reckless, he should rigidly observe the laws of health, and studiously exhibit for their example the most correct moral discipline, and should cultivate his own intellect, that he might be more fitted to train and educate his precious charges.

And, as a practical lesson, he should have his attention called to the fact, that in mercy many premonitory warnings were given him when he violated the laws of temperance; that his head ached and temples throbbed; that he had a fevered skin, and hot, dry mouth; that the nausea and acidity he experienced, as ordinary indications of physical disturbance, should be heeded, and that he should also note his mental disturbances; that he was irritable at trifles, and quarrelsome without any cause; then, if he continued his career, and seemed incapable of perceiving so many body-and-mind-destroying influences, he should be then treated as a madman, and be forcibly prevented from injuring himself or those dependent on him.

We are disposed to consider, with Dr. Caldwell,* *that drunkenness is, in some of its types, itself a species of insanity!* Its tendency bears a marked analogy to the diagnostic symptoms of other forms of this disease. We speak not merely of its chronic forms; but under the potent influence of ardent spirits it may be suddenly developed, and as suddenly cured. We cite the following instructive cases:—

During our residence in Yorkshire, we paid a visit to —, a small place in the West Riding, and was told by a very intelligent person of a small farmer of the name of P—, a married man; that he seemed to love his wife and child very

* "Thoughts on the Pathology, Prevention, and Treatment of Intemperance, as a form of Mental Derangement." By Charles Caldwell, M.D., Professor of the Institutes of Medicine and Chemical Practice in Transylvania University.

much ; and yet, under the influence of drink, he had suddenly made a recent attempt to destroy them both. It appeared that the farmer had been very temperate ; but he had, on the same day of which the fearful occurrence took place in the evening, been drinking many glasses of spirits and water with some one whom he had not seen for years, and that he returned home very drunk, and in a state of great irritability of temper. His very amiable wife did not even rebuke him for his disgraceful excess, yet he did nothing but quarrel and abuse her ; and when at last her womanly nature protested against his words of unjust reproof, he rose like a maniac, and struck her so violently that she fell on the floor, and for a few seconds lost her consciousness. He was furious, and struck himself, vowing vengeance against every one, confirming the words of the poet—

“ That to be wroth with those we love,
Doth work like madness on the brain.”

The woman was still prostrate, and contemplating the strange metamorphosis of him who had hitherto been a most affectionate partner, when she was astounded by another phase—he, with a frenzied expression, charged her with a criminal intercourse with some ideal personage, and then he seized the cradle in which their son was sleeping, and placed it on the fire. She gave a most piercing shriek, but still, nerved with strength and presence of mind, she took the infant from the grate, and holding the blackened cradle with its contents before her mad husband, she said, with a wild and husky voice, “ What is the matter with you? You tried not only to kill me, but you have attempted to murder our poor little innocent Billy! May God forgive you!”

The neighbours had witnessed this painful scene, and they took, in silent admiration, the cradle from this heroic mother; but were shocked and surprised at the conduct of her husband. The violence of her grief, and the suddenness of the whole horrid affair, had sobered him, and he sat with his hands before his face, crying and sobbing, “ May God forgive me!”

A reconciliation took place, and he expressed the deepest contrition ; and in the full and sincere repentance of his heart, explained that the drink he had taken quite maddened him, and had nearly led him to the perpetration of a double murder.

In this case we have an instance of sudden insanity from the potent poison; and, under a new excitement, an equally rapid recovery.

We select another from a police report, which occurred a very few years since in this metropolis:—

“ A woman, in an attic in some low locality, attempted to throw her son, a boy about five years old, out of the window in her room ; and

his screams brought a neighbour, who lived in the adjoining apartment, just in time to save the child. The unnatural mother, who was in a state of inebriation, was given into the custody of a policeman, by whom she was taken to the station-house, and locked in a cell all night. The next morning the case was heard before the sitting magistrate, when the principal witness said (after telling the above incident), that she had not a doubt that the wretched woman had been induced to kill her son, that she might pledge his shoes for a little more gin! And she added, that when she was sober, she was rather an indulgent parent; but that when she was drunk she was like a mad woman, or words to this effect.

"The magistrate then asked the trembling and contrite prisoner if what had been related was the truth? and if she had any questions to put to the witness? She shook her head, and acknowledged that she had no other thought than to get some more liquor with the shoes, and that she was always demented when she had drink! If she had not been so, she was sure she would not hurt a hair of her dear boy's head!"

The worthy magistrate gave her a most excellent lesson for her future conduct, and she was discharged on her own sureties not to repeat the offence.*

We could give many similar instances where "a mother's love," the strongest instinct of woman's nature, has been withered by intemperate habits; and that such mothers, instead of making sacrifices for the preservation of their offspring (sacrifices which such beings will always make in a normal state of mind), will act in violation of every sentiment of humanity to gratify their craving for an irritating poison which maddens them.

Can any other form of disease but insanity express this sad and degraded condition? And these instances suggest the best curative process. In the one instance (Farmer P——), he had been a sober man, and the sudden excess induced the temporary affection; but as he afterwards rigidly avoided the exciting cause, he continued to retain his sanity. In the other instance: though under the maddening stimulus the mother attempted to murder her son, yet a few hours' abstinence had so changed her that she felt her degradation, and the enormity of her contemplated crime.

We therefore cordially agree with Dr. Caldwell, that all intemperate and dangerous drunkards should be treated as insane; then they would be saved from committing crime, and be forced to abstain from that which maddens them. And although there might be some persons who would thus be under the necessity of remaining in seclusion, yet others might, by a curative process, be ultimately restored to society, and avoid any relapse by abstaining from its predisposing cause.†

* We report this from memory, not having the paper in our possession.

† Dr. Caldwell endeavours to show what kind of affection is drunkenness—what

This would be a wise and judicious proceeding, for an inveterate criminal intemperance will often so degrade its victims as to render them useless to any one—if among the higher classes, embittering the feelings of relatives; and in the more degraded portion of the community, rendering them a tax on the more industrious.

The argument is strengthened by the fact, that frequently the habitual drunkards will, even when the intellect is weakened and the limbs paralyzed, still persist in their destructive career! Shall this outrage against humanity be continued? Would it not be conservative to such degraded persons to forcibly save them from indulging in their senseless and suicidal habit? Would it not be an act of mercy to place them in some institution, where time and medical treatment might restore them to a more normal state?

The wealthy who are reduced to such a condition may be removed from the public gaze, and may thus avoid the scoffs of an idle and unfeeling crowd, because their friends have the means of placing them in some private lunatic asylum; but the poor worn-out debauchee, whose lot is extreme poverty, whose home (if such a miserable place can be so called) is destitute of means—he must linger out his cheerless existence, naked and shivering, or accept the last refuge for the destitute—the parish workhouse!

The penalty which is inflicted on the rich and the poor for their intemperate habits is marked by special differences, if we examine the different results on their respective families.

The children of the rich inebriate may be weak and nervous, yet those who have to superintend their education may modify and improve their bodily and mental condition. They have the advantage of an ample supply of food, and care is taken to improve their intellectual and moral perceptions by systematic mental culture.

But the offspring of drunken parents, sunk low into the very depths of poverty, have the horror of their condition aggravated

effect it has on human health—wherein consists its ungovernable appetite for ardent spirits, and how the entire evil may be prevented or removed. “Drunkenness,” he considers, “consists of an affection of the brain—the spinal nerves being also implicated—but chiefly as an affection of the part of the brain belonging to the animal propensities, and hence its first effect in rousing passions and animal desires.” The appetite for intoxicating liquors is regarded by Dr. Caldwell as springing from a morbid excitement of the organ of *alimentiveness*; and he explains the augmented intensity which attends indulgence, by reference to the ordinary principle of exercise invigorating the power.” Dr. Caldwell, therefore, recommends “bleeding, tartar-emetic, cold applications to the head, purging, and spare living. By these means the paroxysm is shortened, and by their repetition its return is prevented.”—Vide a Review of Dr. Caldwell's Essay, in the *Edinburgh Phrenological Journal*, vol. viii.

by painful and unmitigated suffering ; and being surrounded by many temptations of hunger and comparative nudity, they are often stimulated to commit offences against the laws, from a mere sense of self-preservation. And if they avoid such acts, they are still liable to be the victims of impulses, and sacrifice, for present gratification, purity and self-respect. Girls are more to be pitied than boys, as, without knowledge or means, they soon fall victims to prurient appetites.

Although our subject rendered these contrasts a necessary result of our investigation of consequences, yet we cannot help concluding that the offspring of the inveterately intemperate, whether wealthy or needy, cannot and do not escape from some moral blight. The sons of poverty may present the coarser aspects, but the children of the better classes do not escape from the contaminating influence ; they may be restrained from glaring manifestations, but they cannot escape altogether the "sins of their fathers."

Let us then use every effort to promulgate sound views on the effects of intemperance, so as to counteract and neutralize the moral poison which, like a blight, is gradually destroying the bodies and minds of thousands ; and one of the most effectual modes would be, to treat drunkenness as a special form of insanity.

It would be merciful to do so when persons are incapable to resist temptation, and who, when once inebriated, commit the greatest outrages against all decorum, and violate all the laws of morality. The following example was published in a recent paper : *—

"On Wednesday, Margaret Broughton was brought before Mr. Jardine, charged with being a prostitute, and behaving disorderly in Holborn, and assaulting the police. Constable Madden, of the E division, found the prisoner, at a late hour last night, quarrelling with a cabman in Holborn. She was shouting and making a great noise. He remonstrated with her, and requested her to go away ; but she only made the more noise, and abused him with the foulest language. At length he was obliged to remove her to the station-house, when she struggled violently, and struck him. She was drunk.

"The prisoner is the widow of a gentleman who died about seven years back, leaving her an income of 300*l.* a-year. She almost immediately abandoned herself to drinking and low company, and has ever since lived a deplorably profligate life. She draws her money quarterly, and in an incredibly short time squanders it away amongst her disreputable associates. Then, when all is spent, she goes on the town to support herself till the next quarter becomes due. She frequently

* *Dispatch*, November 22, 1857.

gets to prison, and at such times makes great promises of reform. These promises are sometimes kept for a short time after she comes out of prison, but as soon as quarter-day comes round she is sure to fall in with her 'friends,' who, of course, are on the watch for her, and who take good care not to leave her whilst she has a shilling.

"The prisoner was sentenced to three months' imprisonment. As she was being removed, she was heard to declare, that as soon as her term of punishment expired, she would take a cab from the prison door to her lawyer's office, take the quarter's money, which would fall due in the meanwhile, and go away out of town, from her old haunts and temptations."

A glance at the statistics of crimes perpetrated under the influence of partial intoxication, would warrant some stringent means. The murders, rapes, suicides, savage assaults, robberies, and so forth, all stand as fearful evidence that intemperance only stimulates the animal impulses; and we cannot but think that the greatest sticklers for the "freedom of the subject" must be forced to acknowledge, *that it is better to prevent the commission of crimes by forcibly restraining men who have lost all self-control, and who, without such extraneous influence, must steep their souls in deeper guilt!*

Which, we ask, is most in accordance with the true function of an enlightened Government—to suffer the rank growth of immorality to spread so luxuriantly, and jeopardize life, property, and the very stability of the community; or to prevent these consequences, by forcibly restraining offenders from wilfully and deliberately destroying themselves, and inflicting vast evils on others not implicated in their conduct?

There would not be any stretch of power in these conservative means. Few can plead ignorance as to the certain consequences of intemperance—consequences which, though modified by the different organizations of individuals, are never productive of noble and exalted actions. If, therefore, persons make the declaration that they cannot avoid an intemperate indulgence in alcoholic drinks, with all their fostering tendency to crimes, we repeat, they should be placed under restraint, and treated as patients, so that means might be applied to effect their recovery from the morbid influence of a degrading and most pernicious vice.

This treatment would be justifiable on other grounds, as it would save the children of drunken parents, who are almost always driven to the commission of crime, and thus aid in further polluting the moral atmosphere. What otherwise could be expected, when all the example set them is idleness, dissipation, and the worst form of selfishness?

If the present do-nothing state of things continue, we must be

prepared for greater physical deterioration and moral degradation among the masses. For it follows, that if a vast many have inherited the fatal tendency, without some positive remedial treatment they will become more deadly than the fabled Upas tree !

The humblest mechanic may learn enough of chemistry and physiology, in the institutions devoted to his improvement and relaxation, to render him sufficiently well-informed of the destructive consequences of intemperance. He sees written on the brows of the inebriate the branded marks of either criminal depravity or pauper degradation.

If a comparatively educated man is more amenable than one left in extreme ignorance, how much greater, then, is the criminality of those who are early indoctrinated in the sacred truths of religion and a knowledge of moral responsibility, if they prostrate themselves before the idol of intemperance, and lose all the conservative influences of their early culture — if they have become indifferent to the priceless gifts of a conscience void of offence ! Yet such persons must feel occasional pangs when beholding the debilitated minds and diseased bodies of their unfortunate offspring. And when the fatal truth is forced on their consciousness, that they are the authors of these sad calamities, can we wonder that, in a moment of moral nausea, they sever "the silver cord," and thus finish their vicious career by the presumptuous act of self-murder ?

Lastly. We may confirm the actual propriety of treating intemperance as a form of insanity, by the fact that we have heard a vast many criminals, confined in different prisons, declare "that had they never tasted the 'fatal poison,' they might have remained industrious and respectable members of society."

Then what apology can be made for the *national* conscience, that there is not made some vigorous attempt to prevent the evil consequences, by removing the landmarks of temptation to inebriety, by shutting up "The Palaces," with their glaring lights, which necessarily attract the thoughtless, like flies, to their certain destruction ?

We know that some efforts have been made ; but they have either been too feeble, or else the clamour of "vested rights" have so bewildered our legislators, that they have not recognised the many crimes which are concocted in such haunts of vice !

Then, again, shallow political economists have boldly asserted that the revenue arising from the sale of intoxicating drinks cannot be dispensed with, even admitting that there are many evil consequences ! They forget in this calculation the cost of criminals, and the tax which intemperance inflicts by the pauperism it occasions. The expenditure for these joint conse-

quences is indeed enormous. And if, on striking a balance between the receipts, should it even be proved that the fiscal advantages of intemperance still leaves a surplus (which we deny)—then, even then we should pronounce any revenue obtained through such unhallowed means rather as a source of disgrace to an enlightened community than as a subject of congratulation!

We venture to add, that if we remain supine, and do not make any efforts commensurate to prevent the horrid injuries inflicted by intemperance, we must build more infirmaries, more dispensaries, more workhouses, more prisons, and more madhouses; and that for the very purpose of filling them with self-immolated victims, who blindly follow their insatiable appetites, unmindful of the injury they inflict on themselves, their unfortunate offspring, and on the community.

We are told of enthusiastic and besotted idolators worshipping the idol Juggernaut by throwing themselves under the wheels of its car, to which is attached scythes, which mow down these senseless beings by thousands, and we shudder at their barbaric ignorance; but is it not still more surprising that we, who boast of our religion, know that thousands are annually destroyed by alcohol, and we regard it as a matter of course, without making a vigorous effort to prevent such wholesale destruction?

The latter insensate devotees cannot plead ignorance, as the first-mentioned might do, for they know they *must* be sacrificed; and yet they go madly on, paying homage to this enemy of human happiness. They sin with their eyes open, and with a knowledge of the consequences of *their* idolatry. If they will not or cannot turn away from this fatal infatuation, let us forcibly prevent their continuing in a career which must lead to sin, disease, and a moral death; let us place them under restraint, and cure them of their insane affection.

Let us not be lukewarm on the subject, for the picture of intemperance we have sketched is neither embellished nor exaggerated. The scenes of crime, misery, disease, and destitution, in every locality, are the vouchers of our accurate delineation of its consequences. Then let us lay our hands on our hearts, and before God and our consciences declare that we will use every means to stop the onward tide of crime which flows from the polluted sources of intemperance; if we do not do so, we must stand charged with moral complicity. It is not any use merely to lament the evils which flow from it—we must put our shoulders to the wheel, and then pray for help; and to do this, we must show our deep abhorrence of its bitter fruits, not only by precepts, but by our own example; and then, indeed, we may regard success as certain.

In conclusion, we may remark that our recommendation of

restraining the drunkard from continuing in his senseless and destructive career, is not a novel suggestion ; an article on this subject appeared in one of the early numbers of the "Psychological Journal." In this article it was intimated that some place of refuge, or temporary asylum, differing from the usual lunatic asylums, would prove of real advantage to the community, and a blessing to those whose habits of intemperance would render it necessary to seclude them, as by such an arrangement they might be put under a course of judicious remedial treatment, and might soon recover their perfect normality of mind.

If, therefore, this suggestion was carried out into practice, the benefit would be incalculable, whilst religion and morality then would dispense their hallowed peace-giving tendency, and the truly humane would then be spared the many painful spectacles which originate solely through excessive intemperance.

Among the immediate advantages which would result, might be calculated a great diminution of crime ; and amongst the working classes they would, with habits of sobriety, manifest greater prudence and forethought ; and thus, with a sense of self-respect, would be found a great decrease of pauperism and its consequent degradation. And those amongst the wealthy, when they are cured of an insatiable habit, they would be more likely to attend to works of utility, and may thus become benefactors of their less fortunate fellow-subjects, instead of perverting their morals by their previous most debasing example. Thus we may affirm, that the good which would result from forcibly counteracting the inordinate craving tendency of chronic intemperance would be greater than the most sanguine spirits, in the full activity of their benevolence, could ever have anticipated.

And, therefore, as it is our firm conviction that mere precepts, however good, will not correct the errors and crimes resulting from drunkenness, then, in the name of religion, morality, patriotism, and humanity, there is demanded some forcible and effective means to render certain this essential and all-important reform in the habits of a vast proportion of the community.

L.

ART. VII.—ON THE TREATMENT OF INSANITY IN JULIUS HOSPITAL, WÜRZBURG,

Under the Management of

DER HERR HOFRATH DR. VON MARCUS, Senior Physician of Julius Hospital,
Ritter des verdienst Orders der Bayerschen Krone, &c. &c.

(Communicated by EDWARD MOTTLEY, Esq.)

THE following subjects will be treated *seriatim* :—

- 1st.—*Six Years' Statistics of the Lunatic Wards in Julius Hospital.*
By Dr. ERNST SCHMIDT, late Assistant Physician.*
- 2nd.—*Clinical Lectures of Dr. VON MARCUS, on Insanity, during the Session 1857-8.*

Introduction by the Translator.—Julius Hospital, in Würzburg, is the magnificent foundation of Julius Echter, Prince-Bishop, and sixty-sixth Bishop of Würzburg, and Duke of Franconia. This eminent prince and prelate, who must be classed with the foremost benefactors of his fatherland, who founded an hospital and a university in Würzburg, and rebuilt or restored twenty hospitals and more than one hundred and twenty churches in various parts of his Principality, was born on the 18th of March, 1545, at Mespelbrun, in the Spessart, about twenty-two miles from Frankfort-on-the-Maine, and died at Würzburg on the 13th of September, 1617, one year before the breaking out of the devastating thirty years' war. He was the last descendant of the time-honoured and illustrious family of Echter von Mespelbrun; and after studying in Belgium and France, finished his education in Rome, where he obtained the degree of Doctor of Civil Law. On the 17th of August, 1570, he was chosen Dean of Würzburg, chiefly through the intercession of Fredrich von Würzburg, the reigning Prince-Bishop, who appears to have foreseen his future greatness; and on the demise of that prelate was elected to the vacant throne on the 1st of December, 1573, being then under thirty years of age. His election was confirmed by the Emperor Maximilian the Second and the Pope; but the ceremony of his installation was deferred until Whitsuntide, 1575, when he was at the same time consecrated priest.

His reign extended over the lengthened period of forty-four years (the average possession of the see by the eighty-three bishops—ending with Carl von Fechtenback, 1808—being about twelve years and four months), “of which,” to employ the language of one of his encomiasts, “nearly every day was distin-

* “Sechsjährige Statistic der Irrenabtheilung des Julius Hospitas,” from the *Zum Schutze der Irren*: by Dr. Ernst Schmidt, a physician of rising reputation, now in America (Chicago).

guished by some important act. His government was characterized by a profuse but judicious liberality in public works. He found his diocese greatly reduced by debt, by the peasant war, and by the defection of great numbers of his subjects, who had embraced the Protestant faith;—churches and hospitals were in ruins, cloisters and monasteries abandoned, and their possessions wasted and destroyed. A mind less vigorous, and a less skilful administrator, might have viewed its condition with despair, and turned from the task of restoring its shattered finances. The first act of his reign was to limit and control the disorder and extravagance of his court, and he lived after his election in such retirement and seclusion, that serious doubts were entertained of his capacity for the good government of his diocese; but these fears were soon dissipated, when one great work after another, matured in this retirement, was carried into execution with extraordinary perseverance and success. Resolved to dedicate his energy and ability to the see of Würzburg, he refused the Palatinate and Archbishopric of Mayence, to which he had been elected by the Chapter in 1582. The two great works of Julius, and by which his name has become historical, are the University and Hospital of Würzburg. Struck by the almost total want of institutions for the benefit of the poor, while the nobility and clergy were amply provided for, he “resolved,” as stated in the charter deed, “to endow a Spittal for all sorts of poor, sick, and impotent persons requiring medical, surgical, and other necessary assistance; for abandoned orphans, pilgrims, travelling labourers, and other necessitous persons.” The foundation-stone of the original building was laid by Julius on the 12th of March, 1576, and was opened on the 10th of June, 1580. The extensive circuit of the building contained a mill, a slaughter-house, a large garden, baths, and an “inn” for the reception of poor wayfarers, who were there entertained for a day and a night; and everything necessary and convenient for the reception of the poor and infirm belonging to the Principality (for our poor brothers and sisters, as stated in the charter), for sick persons—with the exception of patients with disgusting and contagious diseases—orphans, pilgrims, and labourers, when sick; such persons to receive and be supplied with such clothing, meat, and drink, and necessaries, as the income of the foundation would allow. The last clause of this document threatens “that whoever deprives the hospital of anything—that is to say, the poor and abandoned orphans, and the sick—shall be accused as perverters of the charity, and dishonourers of God’s glory, before His judgment-seat on the last day.” In one remarkable instance, this threat operated very successfully. When Gustavus Adolphus, after plundering the

town and university of Würzburg, visited the hospital with the intention of emptying its then well-filled coffers, the reverend principal of the hospital read the concluding paragraph to the Swedish King, who, being much struck with its import, drew back, saying, "I will have nothing to do with this priest in the other world," and left the hospital with its treasury untouched. At the time of its foundation, the property of the hospital was estimated at 500,000 florins (42,000*l.* nearly); but the accumulation of nearly 300 years of good management has increased it to 6,000,000 florins (500,000*l.*), consisting chiefly of estates in Bavaria and Baden. The duties and benefits have increased in an equal degree, and the single physician and chaplain, and the 120 inmates of the founder's time, have augmented to three senior physicians* and five assistants, an apothecary with two assistants, a house-surgeon, a chaplain and two vicars, with about 900 inmates of all classes, consisting of pensioners (*pfründners*), sick persons without distinction of country or religion, and an asylum for the reception of curable insane patients. As a medical school, it possesses a European reputation.

The original building has yielded to time, and to a destructive fire which occurred at the close of the eighteenth century; the present noble structure bears the date 1791. Such is the flourishing condition of an institution whose founder was, by his contemporaries, deservedly called great. If, in his zeal for his religion, he was at times severe, his faults were those of the times in which he lived; his virtues were his own. The general condition of the hospital not being the object of this article, we will limit our observations to that division dedicated to the relief of insane patients, under the benevolent superintendence of Dr von Marcus, and take for our guide Dr. Ernst Schmidt's "*Six Years' Statistics of the Insane Wards of Julius Hospital*," who says:—

"It is evident that for more than 200 years the insane in Julius Hospital were treated merely as pensioners, and the first weak attempt to introduce a rational system of psychology (*psychiatrik*) took place about the year 1780; the locality for the then patients being the same as that now used for the incurable—viz., a large secure vaulted hall, on the ground floor of one of the wings connecting the principal buildings. It may be truly considered as one of the first institutions of its kind in Germany; and it was indeed, somewhat more friendly and humane than many others—at least, we are so led to conclude, from the examples of similar buildings that are existing at the present day—for example, the famous Narrenturm, at Vienna. At the commencement of the

* The appointment of the senior physician is honorary; each receives a nominal fee of 300*fl.* (25*l.*) yearly, the salary of Upsilonius, the first physician.

present century, the number of patients was somewhat above 30, which soon augmented to 40, which was at that time considered as the normal number, and only exceeded in cases of pressing necessity. The proper separation of the insane into curable and incurable patients appears to have taken place between the years 1785-90—at least, such is the information derived from the account of Dr. Müller, the senior physician, whose book on the treatment of the insane was published in the year 1824. This account extends from 1796 to 1823, and gives 528 patients as being received—viz., 258 men, and 270 women. During this time, only 21 patients, on the average, were annually received; but the number was constantly increasing, 15 being received during his first year of office, and 25 the last. What he relates of the proportion of his successful cases must be received with some reserve, as it is contradicted by the more sober computations of the present day. Dr. Müller gives 292 patients, or 56 per cent., as perfectly restored; and 62, or 11 per cent., as improved; while at the present day, 40 per cent. perfectly restored must be taken as a very favourable result. Under the next physician, Dr. Schönlein (the present chief physician to the King of Prussia), about 400 curable patients were received between the years 1823 and 1833. Materials to show the result of his practice are not to be found. Towards the end of the year 1833, Dr. von Marcus was appointed senior physician of Julius Hospital, professor of clinical medicine, and director of the internal management of Julius Hospital, as regards the insane and the pensioners. What he accomplished as professor of clinical medicine may be given in another place; what he effected as senior physician—his earnest zeal for the adoption of all contemporary improvements, and his disinterested exertions for the welfare of the noble institution to which he was appointed principal—will give his name a lasting endurance in its annals.

“Above all, we have to thank him for the arrangement and improvement of the lunatic wards as they now exist, and which need not shun a comparison with any institution especially dedicated to the reception of insane patients—notwithstanding many deficiencies which, in old buildings first appropriated to this purpose, were with us not to be obviated, and which are demanded by the multitudinous requirements of the present day, and not unfrequently carried to excess by the asylum physician.

“During the first nine years of the direction of Dr. von Marcus, the number of applicants so increased, that frequently, by improper crowding, 60 patients were received in one year—until the year 1841, when he introduced those extensive alterations and improvements which will allow the reception of from 90 to 100 patients. Two extensive wings, perfectly adapted for the

purpose, are appropriated for curable patients." [For cleanliness, neatness, and cheerful aspect, these apartments are everything that can be desired. Every patient has a separate bed, furnished with curtains—and the whole range of apartments have the appearance of a well-ordered English academy.—E. M.]

"All the cells for dangerous patients are floored and wainscoted with wood, and the approaches to the stoves and windows painted of a light-green colour, so that these cells make no unfavourable impression. Some handsome isolated apartments for private patients, are also provided. For extremely noisy and raving patients, fitting cells, capable of being easily warmed (heizbare), are erected in a court where the occasional noise cannot be heard by the convalescent patient (a precaution not always sufficiently attended to in asylums). A retired part of the garden is appropriated to gymnastic exercises, skittles, &c., and which, with its summer-house, affords on fine evenings an agreeable spot for recreation and recovery. Opportunity for manual labour, so far as it is desirable as an auxiliary for recovery, is provided, under the superintendence of an attendant, in the wood-house. The numerous and well-chosen attendants render the use of coercion chairs and strait-jackets only necessary in extreme cases. The new steam douche and shower-baths (the latter often of the greatest service to insane patients) leave little to be wished; indeed such satisfactory arrangements are hardly to be met with in many larger establishments.

"Great importance being attached to the quantity and quality of the food for patients in asylums, we will give the Diet for the Sick, or No. 2 Diet Table:—

"No. 5.—Dinner— $\frac{1}{2}$, or full portion—meat soup, with white bread $\frac{1}{2}$ lb. beef, with vegetables.

"Supper—Soup, with $\frac{1}{2}$ lb. veal or calf in meat.

"Breakfast—A portion of soup, with white bread.

"Bread—For the whole day, 14 ozs. of rye or 11 ozs. of wheat bread.

"Wine—Each patient receives as much wine of the second-class as the senior physician thinks necessary.

"Extra food and wine can be given by the permission of the three senior physicians; and wine of the first-class."

"The above Table is reduced $\frac{2}{3}$, $\frac{2}{3}$, $\frac{1}{3}$, at the discretion of the medical attendant; fruit, coffee, poultry, are also frequently given.

"Immediately after the completion of the improvements, the number of applicants increased, and the present more exact statistics show the capabilities of receiving 100 patients annually.

"In a financial point of view, the admission of curable patients to the hospital is extremely favourable. All persons admissible as pensioners are received as patients—that is to say, all the poor

of the former Principality of Würzburg, and now of the whole of the circle of Lower Franconia, are received free of charge, with the exception of the necessary clothing, which must be provided by the parish (tleimath gemeinde) to which the patient belongs. But even this regulation is not insisted upon when the parish is notoriously poor.

"Patients with independent property are admitted upon the payment of 30ks. (10*l.*) daily; and when they require a separate apartment and special attendant, 1 florin (1*s.* 8*d.*)

"When we state that, between 1798 and 1854, more than 2500 curable patients have been received—nearly 2000 gratis—and if we take into account 250 incurable patients received as pensioners for the whole term of their life, it does not require another word to prove that the division of Julius Hospital appropriated to the reception of insane patients has acquired an historical right to the gratitude of the circle of Lower Franconia.

"Consulting the more exact statistics of our own time, from 1848 to 1854, we find that the reception of curable patients during that time (including a surplus from 1847-1848) amounted to 512—viz, 287 men, 225 women; the re-admissions during that period being—

Men .	1	-	6 times	Women .	16	-	twice
"	2	-	4 "				
"	3	-	3 "				
"	25	-	twice				

"The number of individuals is therefore reduced to 454—or 245 men, and 209 women (54 and 46 per cent.) Singly considered, in four years the men, and in two years the women predominated. In order to form a judgment at what season of the year the greatest number of cases occur, requires a greater exactness of observation of the previous and earlier symptoms (anamnese) than unfortunately is generally the case; as we know that not only the laity, but unfortunately the faculty, do not sufficiently distinguish between cause and effect—essentials and non-essentials—putting aside the intentional deception that is too frequently practised by the patient's friends, and, alas! often by the medical attendant, with regard to the time the patient has been affected previous to being brought to the asylum. We will, however, take 132 cases, on which no doubt rests as to the date of the attack:—

January - 14.	April - 12.	July - 9.	October - 8.
February 11.	May - 11.	August 10.	November 7.
March - 13.	June - 13.	Sept. - 14.	December 10.

"This Table contradicts the assumption that has prevailed nearly undisputed since the statement of Esquirol—viz., that the greater number of cases occur in the hot months—as it must be admitted that a comparison of many thousand examples show a marked increase of attacks of insanity from January to July, and a corresponding decrease to the following January—the latter month giving 6·5 per cent. to the 10·5 per cent. of July. These proportions appear pretty correct for the south of France, Italy, and similar climates, whose winters resemble those of our latter autumn. So with us, to the more wealthy, who cannot be so perfectly and continuously protected from the heat of summer as from the cold of winter, the summer months may be equally dangerous; but for the greater part of our country population, and the poorer classes, the injurious effects of winter are greater than the highest summer temperature, which can be readily understood when we consider the more than tropical heat our peasant and labouring classes maintain in their apartments, which serve at once for living and sleeping rooms—where they cook for their families, and prepare food for cattle; this extreme heat, suddenly alternated with the severe cold of the Bavarian winter, too often accompanied with want of sufficient clothing, protection for the feet, and insufficient nourishment—conditions upon which the results of the accompanying Table may be grounded.

"The period of life which most predisposes to mental alienation has always been one that has occupied the attention of the statistical writer. Esquirol maintained that, with men, from thirty to forty, and with women from fifty to sixty years, were the most dangerous. I must acknowledge that to me this statement has been one that, with reference to our social and natural relations, appears to be little founded upon reason. In fact, we have quite a different result from more than five hundred cases [The re-admissions must be included in the number, because pre-disposition at a peculiar age will also render the re-admission more numerous.] The following Table gives the ages:—

OF MEN.										
Before 15	15 25	25 35	35 45	45 55	55 65	65 75	After 75			
1...	58 ...	77 ...	68 ...	58 ...	22 ...	6 ...	2			
Per cent. $\frac{1}{3}$...	18 $\frac{1}{2}$...	27 ...	23 $\frac{1}{2}$...	20 ...	8 ...	2 ...	$\frac{1}{2}$			
OF WOMEN.										
2...	41 ...	90 ...	58 ...	35 ...	17 ...	2 ...	0			
Per cent. $\frac{1}{3}$...	16 $\frac{1}{2}$...	36 $\frac{1}{2}$...	23 $\frac{1}{2}$...	14 $\frac{1}{2}$...	7 ...	$\frac{1}{2}$...	0			

Consequently, with us the greatest number of cases occur with both sexes, between the ages of twenty-five and thirty-five at which period of life the human being attains the zenith of his

or her mental and physical powers; after which time, except in rare instances and extraordinarily gifted individuals, those powers become more languid, and a greater passivity predominates over all the functions. This is also the period when, in most cases, the individual commences an independent existence, and loses the support of his family. Now begins, with most persons, the greatest exertions; the time when the passions and affections expand, under the influence of the meridian hour; the time when the mental powers are put to the severest trials, and become steeled and invigorated, or, alas! by disappointed hopes, unfortunate speculations, or by powerful interruptions of the full tide of human passions, too often shattered and destroyed for ever! After this period, the per centage of the cases suffer a marked decline—slower with the men than with the women, whose decline, corresponding with their earlier development and maturity, is equally premature. The few cases of insanity which occur after sixty years of age, with perfectly healthy individuals, mostly belong to dementia senilis and apoplectica, arising in most instances from pathological change. As regards sex, with us, as in most instances, the male patients predominate; yet we can affirm with the greatest truth, that an authentic statement of the difference of numbers between the two sexes requires a much more extended computation over different countries than we have at present. Of the men, 103 were unmarried, and 142 married; of the women, 161 unmarried, and 48 married. Of the men, the greater number, nearly three-fifths, were married; whilst with the women, more than three-fourths were, at least in the world's eye, "withering on the virgin thorn." With the men, masturbation was unhappily proved with more than one-third of the patients; with the women, the proofs are more difficult. In no one instance (at least, with the men) was want of sexual chastity (*Seschlechts befriedigung*) presumed to be the cause of mental alienation."

On the all-important subject of hereditary predisposition, or inheritance (*Erblichkeit*), Dr Ernst Schmidt says:—

"Hereditary predisposition is proved in more than three-fifths of all cases, to which more than two-fifths to the so-called direct, and one-fifth to indirect, must be attributed. Fortunately, however, the entire doctrine of inheritance begins to be subjected to a more searching criticism, and we must remember in how many cases very different conditions than those of the so-named inheritance are the cause of disease in members of the same family. This much is certain, that in cases of well-proved direct inheritance, but very few patients have ever perfectly recovered."

Dr. Ernst Schmidt now gives the annexed tabular view of

132 ON THE TREATMENT OF INSANITY IN JULIUS HOSPITAL.

the 512 cases treated in Julius Hospital between the years 1848 and 1854:—

Form of disease.	No.	Cured.		Improved.		Uncured.		Dead.		Remaining.	Average Age.
			Time in Asylum.								
Pure Hallucination.											
Men	1	1	6 wks.	...	...	...	...	...	...	...	52
Hypochondria.											
Men	8	2	2 mon.	2	...	...	...	3	3 mon.	1	39
Women	2	2	...	...	...	...	...	...	...	...	32
Hysterico.											
Women	2	...	...	...	...	1	22 m.	...	...	1	
Melancholia.											
Men	68	30	3 mon.	19	4 mon.	9	8 mon.	4	3½ m.	...	34
Women	91	48	4½ m.	20	6 mon.	11	11 m.	8	4 mon.	4	33
Mania and Delirium.											
Men	87	52	3½ m.	14	6 mon.	6	8 mon.	11	6 wks.	4	35
Women	53	35	4½ m.	7	9 mon.	6	18 m.	3	1 mon.	2	31
Eroto & Nymphomania											
Men	3	1	2 mon.	2	1 mon.	...	...	...	...	...	29
Women	17	3	3 mon.	3	8 mon.	10	15 m.	...	...	1	32
Dementia.											
Men	62	9	3 mon.	22	7 mon.	35	8 mon.	8	2 mon.	8	
Women	57	4	6 mon.	10	10 m.	29	12 m.	4	8 mon.	5	
Stupiditas.											
Men	17	...	...	2	6 mon.	14	6 mon.	1	...	30	30
Women	6	...	...	...	...	6	7 mon.	...	...	...	26
Delirium Tremens.											
Men	15	12	1 mon.	...	...	1	2 mon.	2	1 day.	...	38
Women	1	1	1 mon.	...	...	...	...	...	...	...	43
Epilepsy.											
Men	5	1	2 mon.	2	2 mon.	2	6 mon.	...	...	...	35
Women	1	...	...	...	...	1	6 mon.	...	...	...	10
Chorea with Delirium.											
Men	1	1	6 wks.	...	...	...	...	...	...	...	10
Men	287	109	...	63	...	67	...	29	...	19	...
Women	225	93	...	49	...	64	...	15	...	13	...
	512	202	...	103	...	131	...	44	...	32	...

In the remarks appended by Dr. E. Schmidt to the Table, he says:—

“Our most numerous form of disease was melancholia—viz., 40 per cent. of all the women, 23 per cent. of the men. Mania and delirium (tobsucht) is represented by 30 per cent. men, and 23 per cent. women. With dementia, including dementia senilis, 28 per cent. men, and 23 per cent. women. The most favourable result as regards cure, considering the number of cases of each peculiar form of disease, is delirium tremens—80 per cent.; then maniacal female patients, of whom 66 per cent. left the asylum cured; maniacal male patients, 59 per cent. Melancholia gave a more favourable result for women than men; of the first, 52, and of the latter, 44 per cent. cured. The proportion of fatal cases was equally unfavourable for the men, of whom 10 per

cent. died of the whole number received, and of the women nearly 7 per cent. The form of disease most fatal was hypochondria, which exhibits with the men, 37 per cent.; with the women, melancholia, nearly 9 per cent. With male maniacs, above 12 per cent.; but with women, hardly 6 per cent. died. On the average of all the cases, the deceased were the shortest time in the asylum; and the patients the longest under treatment were the maniacal women, who were dismissed uncured after eighteen months' treatment; the nymphomaniste, 15 months; one hysterische, 22, &c. The most speedy recovery was with delirium tremens—4 weeks, average; the latest, with melancholische women—4½ months. However we may be satisfied with the result of the treatment at Julius Hospital, we cannot conclude this statistical voucher without forbearing to mention the great evil in treatment of lunatics, and whose sin it is that we cannot show a result still more favourable—we mean, the neglect in not bringing the patient to the asylum at an earlier period. We will employ 220 cases, where the correctness of the time of the duration of the disease previous to the reception in the asylum admits of no doubt:—

Duration of disease previous to reception in the asylum.	No. of cases.	Of which were healed.
1 to 3 months.	39	25 = 64 per cent.
3 to 6 "	46	20 = 43 "
6 to 12 "	48	16 = 33 "
1 to 3 years.	87	15 = 17 "
	220	76 = 34 per cent.

"These numbers require no commentary, and show at the first look where the foulest spot of our present management lies (*irrenuesens*). Its removal would diminish the inmates of our asylums one-third. . . . How and in what manner Hofrath Dr. von Marcus rendered our institution available for the purpose of clinical instruction, is too well known and acknowledged to require more than a passing notice here. Since the year 1841, Dr. von Marcus rendered access to the patients practicable, in the form of clinical visitations. A practical course of clinical psychiatria commenced (*eine werkliche psychiatrische klinick*), and that has been rewarded by a numerous and zealous auditory."

Dr. Ernst Schmidt then gives the following cases, as some of the most interesting that occurred during 1848-54. Of chorea St. Viti, accompanied with delirium, we have a case of great interest:—

"1. A boy, ten years of age, healthy, and without family taint, one day walking with his mother, stooped to pick up what he thought a handsome stick lying in the road. The adder (for such it was), when seized, wound round his arm without hurting him, and escaped. The boy cried aloud, trembled, and in a few days presented a perfect type of chorea St. Viti. The delirium that supervened wore a religious character. Treated with nutritious food, cheerful amusements, and the

employment of Valerian iron. Perfectly cured in less than two months.

2. "R——, colour manufacturer; healthy, with an inclination to spirits. In domestic and financial relations, not fortunate. In 1849, employed himself zealously with the return of members to Chamber of Deputies. Attempted electioneering himself, and thought seriously of becoming a deputy. His imagination soon passed the limits of reality—he firmly believed that he was chosen deputy, for the purpose of being named President of the Chamber. He came to Würzburg in consequence, to fetch his patent from the Government. Felt confident of becoming Duke of Franconia, in which case he promised us his favour and protection. Cured in three months.

"3. S. B——, twenty-one years old; slight, without hereditary predisposition. Often chlorotic; suffered from menorrhagia. Was one day offended, and her modesty outraged, by a young man suddenly exposing her person during the time of her menstruation. She was suddenly seized with convulsions; a few hours after, with delirium. In a few days, mania supervened. She raved uninterruptedly; was uncleanly and immodest in the highest degree; digestive powers impaired. Cured in eight months.

"4. S. B——, twenty years old, well formed, and powerfully built, without the slightest disposition to hereditary predisposition, had recovered in her eleventh year from an attack of typhus; menstruated at eighteen, irregular, but at the time of her attack regular. In the middle of July, S. B—— fell asleep in a warm bath, and slept in water constantly decreasing in temperature, five hours before she was discovered; in the evening of the same day mania appeared, with ideas of the most exalted character; raves, and becomes dangerous to approach. Four weeks after her attack she was brought to the asylum, and left it in four months perfectly healed.

"5. F——, twenty-two years old, Protestant schoolmaster, healthy, strong constitution; went over to the Catholic Church, and will dedicate himself to the priesthood—felt great anxiety about the validity of the Protestant baptism; doubt its Christianity, and could not be persuaded to the contrary. The day before the one appointed for his full reception into the Catholic Church, he heard a voice which commanded him to make a trial of his being in the grace of God: he obeyed, and sprang out of his window, two stories high, to the court below, and received no injury. He employed himself zealously in prayer, on returning to his room, to be able to resist all temptations of the devil; but the voice continued to follow him, and he obeyed a command to leap from the wall of the fortress into the fosse below, which was fortunately a mere swamp; here he was found torn and bruised, and quite speechless. After four weeks' residence in the asylum, he was so far restored from his demono-melancholia that his friends removed him from the asylum: no relapse.

"6. S. M——, thirty-one years old, servant, single; healthy, without hereditary predisposition; mother of two healthy children—regularly menstruated—suddenly was attacked with religious melancholy on the unexpected death of her father—believed that the wicked

would prevail over the good, but she would remain true to her Saviour; and as a propitiatory sacrifice exarticulated the upper joint of her little finger. She was brought to the asylum; suffered an attack of typhus; left in less than three months, perfectly restored, mentally and bodily.

"7. F. B——, forty-five years old, still menstruated regularly; mother of four healthy children; healthy. Insanity was proved in one member of her family—father's brother; was suddenly attacked with religious melancholy, after hearing twenty sermons consecutively from the Jesuit Missionaries; was holy and in a state of grace—and will intercede with God for a fallen world—screamed and raved, and at last bit off an inch and a half of her tongue, which only hung by a few ligaments; the lesion was secured as well as possible, but gangrene supervened; the end of the tongue fell off, and she died in a few days.

"8. J. H——, thirty-nine years old, married, healthy, without direct or indirect predisposition; obtained permission to establish a dyehouse in W——; made the necessary arrangements, carrying on the business with good success, till the authorities forbade the dye refuse to run into the stream that passed by the dyehouse, as the fish suffered in consequence. H—— remonstrated on very reasonable grounds—in that his condition should have been known before he was allowed to erect his premises, and that the revocation of his licence would ruin his business. His remonstrances were without effect; angry words were exchanged; and H—— was imprisoned forty-eight hours for slandering an official person (*Amtssehren beleidigung*). From this time he evinced great irritability, without his friends perceiving any symptom of insanity. When he was informed by a legal officer of a second unfavourable decision against him, he seized an axe, and ran to the office of the magistrate, who was necessitated to escape into an adjoining room. J. H—— attacked the massive door with great violence, and drove the axe with such force into the wood as fortunately rendered him unable to extricate it; he then ran away. Some days after, he allowed himself to be taken willingly to prison by the gendarmerie, prayed aloud, and did not recognise the magistrate. Two days after, by the advice of the official physician, he was removed to the asylum of Julius Hospital; mania ensued. Cured in six months, and remained perfectly sane for two years. Then H—— began again to demand compensation for the loss of his business, which produced no result, when he again attacked the magistrate in a paroxysm of rage. Captured, he made his escape from his guards, and, after four days' wandering, came himself to the asylum to beg for admission. He was less excited than in his first attack, but suffered from pronounced confirmed delusions—*e.g.*, the Virgin appearing to him, and comforting him by promising to punish his tormentors. Intelligence, thought, and will, quite changed; and his body wasted by sleepless nights, disturbed digestion, continued restlessness. However, after six months' quiet, and restoratives, he became convalescent, and had no relapse."

In our next number, the first of Dr. von Marcus's Lectures will appear.

ART. VIII.—PHANTASMATA.*

It is one of the elementary laws of matter, that, when in motion, it has the power of communicating to other matter a similar motion to its own. This is not only true of masses dynamically considered, but also of molecular and chemical conditions, in which changes in progress have the power of inducing similar changes in substances similarly constituted; as in the case of fermentation. The dynamics of mind have been less investigated than those of matter; yet every step taken in this course shows more and more clearly that mind individual and mind collective, both act in accordance with certain definite laws, not dissimilar in nature and general results to those of matter. One of the most interesting results obtained from such inquiries, is the more clear comprehension of certain *class* states of mind—states produced in small or large communities as if by a veritable fermentation—a propagation of impulse molecularly amongst the masses, producing true epidemics of thought, emotion, or volition, as defined in their symptoms, as obscure in their source, as erratic and uncertain in their progress, often as deplorable in their results, as epidemics of cholera, plague, or small-pox.

Scientific psychology is a study of late invention; still imperfect in many of its details; not at all reduced to the condition of an exact science;—very imperfect still is our knowledge especially of epidemic crime and insanity; of epidemic emotion and volition. Yet the subject has of late years attracted much attention, and many most valuable contributions to its literature have been received. The most recent and most commendable treatise which we have seen, is that which forms the especial object of this notice. Mr. Madden has been well known, both to the profession and to the literary world generally, for about a quarter of a century, as an able and popular writer. His work on the “Infirmities of Genius,” of which we have made some use in another part of this Journal, has for many years been a standard favourite. The present one is of a more weighty and learned cast, as becomes the more serious and important subject. It is full of matter, well-arranged, well-digested, and admirably calculated to illustrate the deeply-interesting subject under treatment. As to the precise object of the work, we will let Mr. Madden speak for himself, by which we shall see the very comprehensive views taken of the bearings which these studies have upon social and political science:—

* “Phantasmata; or, Illusions and Fanaticisms of Protean Forms productive of Great Evils.” 2 Vols. 8vo. 1857. By R. R. Madden, F.R.C.S., Eng., M.R.I.A., &c.

"The subject of this work has largely to do with the failings, and infirmities, and passions of mankind, and their accompanying disorders of the imagination; for to these sources must we attribute the epidemic fanaticisms which we meet with in history *and elsewhere*—simulating at one time an ardent zeal for religion, at another a glowing love of liberty; now a laudable ambition to rise in the world, to attain to power, to obtain wealth, to add field to field, possession to possession, dominion to dominion; anon a strong wish and settled purpose to dominate over others, to master their wills, to invade their rights, to trample down their inferior intelligence, weaker powers, or feebler energies of mind or body.

"We are accustomed to regard passing events of an extraordinary character which disturb society as indications of rather too much political excitement, or polemical heat, sectarian strife, competition in trade, monopoly in patronage and preferments, an insufficient police force, an inadequate representation, too little rationalism in religion, or reverence for law, or devotion to material interests, or knowledge of the true principles of political economy. We find it saves the trouble of thinking to fall into this way of viewing remarkable outbreaks of popular frenzy, like those of the Reign of Terror of the French Revolution, in 1792 and 1793; outbreaks of intolerance and inhumanity in Spain and Portugal in the times of the Inquisition; outbreaks of barbarity in England and Scotland and the New England States of America, in the proceedings against witches; outbreaks of superstition in various countries in regard to new revelations of pseudo-saints, pseudo-'spiritualists,' pseudo-seers of mesmerism claiming prophetic gifts; outbreaks of a raging avidity for sudden gain—for means, no matter how they may be acquired, to live luxuriously, or to seem to others to be rich. . . .

"The madness of the various forms of fanaticism is not confined to individuals—it extends to communities, at times and intervals more or less widely separated, and seizes on the minds of nations at periods of greater intervening distances, that have been terminated by great wars, or other grievous public calamities. . . . Such fanaticisms have all the distinguishing characteristics of epidemic mental disorders."—Preface, p. 6-8.

Mr. Madden attributes these fanaticisms to an epidemic disorder of the moral sense, which is not to be removed "or remedied by materialism professing Christianity, or sanctimony and sectarianism proffering for genuine religious instruction the teachings of strife and bitterness." He notices also, as a remarkable fact, that the most extensive fanaticisms that the world has seen have not originated with the poor and uneducated, but with persons of abilities and education; with, in fact, the "educated men." One remark on this subject is impressive and important:—

"It is said that 'man, ignorant and uncivilized, is a ferocious, sensual, and superstitious savage.' But there may be a great deal of savagery in the heart's core of civilization, when the intellectual faculties alone

have been educated, and the moral feelings and affections left untought
To use common but significant terms, you must educate the heart :
well as the head."

The first illustrations of epidemic insanity which are given, as derived from the various disorders and commotions which affect various parts of Europe in the fourteenth, fifteenth, sixteenth and seventeenth centuries, and "signally in the convents of several of the religious orders in France, Spain, and Germany. These disorders appear to be both contagious and epidemic. With many of the facts we are sufficiently familiar, through the medium of Hecker's valuable treatise on the "Epidemics of the Middle Ages." Mr. Madden makes some valuable observations from which we shall quote:—

"The mind and body reciprocally and mysteriously affect each other. To determine where disorders of the body cease to be mere physical derangements, and where mental maladies supervene on bodily ailment and to distinguish between states of health in which bodily functions or organs are affected, and mental faculties or moral feelings are perverted, requires a large amount of knowledge of medical philosophy, well as of practical acquaintance with medical pursuits."

He enlarges upon the necessity for calling in history to aid in our researches, and "it might be added, we must have the historic light before we can understand how many degrees there are of enthusiasm, and of excitability of the nervous system: which amount not to the temperature of the mind at which reason ceases to be recognised as a controlling power."

Mr. Madden holds that the epidemic forms of mental excitement are not merely matters of history, but are liable to recur at any times and seasons when the proper conditions are present: perhaps in modified forms, in accordance with the changed aspects of society, of science, and of belief; but still, that imagination will always, to the end of time, and in all forms of civilization, have a tendency to exert a powerful influence over "the production of disease, and morbid sentiments that border on insanity."

That we are not free from these tendencies is a position capable of ample illustration; and Mr. Madden, after alluding to *M. Thoms of Canterbury*, and *Johanna Southcote*, thus proceeds:—

"Has the enlightenment of the nineteenth century so entirely dissipated the dark, thick mists of demented superstition that no traces of it are to be found in modern English and American records? Is what language is the future word-painter of Welsh history to depict the strange antics and the frantic orgies of the Jumpers and Revival fanatics?"

"Will Macaulay 'come down' to the period of the field-meeting, the saints, and the love-feasts of the brethren and sisterhood of the elect in Wales? Or will Alison 'finish Europe' with a chapter

modern miracles, furnishing a *résumé* of the phenomena, and an elucidation of the mysteries of clairvoyance?

"Shall we read in that chapter, of revelations from the other world by persons in the 'superior condition,' solemnly announced in the presence of Christian ministers, of dignitaries of the Church, impugning doctrines of Christianity which are deemed fundamental truths in all its churches?

"Must we go back to the middle ages for sorcery and dealings with 'Satan's invisible kingdom?' Or may we not only have to cross the Atlantic on a voyage of discovery for devils, and those who commune with 'fallen angels' and 'inferior spirits?' Have we not in America, at the *séances* of the spirit-rappers, scenes which may remind us of the 'sabbaths' of assembled witches; media stationed in circles, intent on conjurations; discoursing in a jargon scarcely intelligible to the uninitiated; invoking spirits—some 'disobedient,' 'mischievous,' 'perverse,' 'mocking,' and 'mendacious;'—others 'benign,' 'angelic,' and 'divinely gifted intelligences?'"

After noticing the Mormons, and various other deluded associations, we find the following shrewd observations:—

"We have abundant confessions of compacts with devils, preparation of philtres, all kinds of extravagant practices of a sortilegious kind, in the records of judicial proceedings of the middle ages, and of those occurrences which took place under the sanction and auspices of spiritual superstitions, carried into effect by the strong hand of the secular arm at the gibbet and the stake.

"And in the nineteenth century we have no dearth of avowals of sorcery, of interviews with Satan, of power derived from his angels, of the perpetration of fearful crimes committed by Satanic suggestion; but not in the same places and under the same circumstances as in the middle ages. *We have them now in lunatic asylums*, on the part of persons who are restrained on account of their insanity, and not burned in the market-places, on the plea of vindicating God's honour."

—(p. 11.)

After noticing the "fanaticism of infidelity," and its effect in producing the horrors of the French Revolution, Mr. Madden observes—

"An infidel periodical literature in England is accomplishing a similar mission there—slowly, perhaps, but surely—among the great masses of the people; and where its propagandism of infidelity, and the vulgar cynicism of socialism, does not extend, corresponding results may be expected from the prevalent indifference in matters of religion which characterizes the literature, science, and philosophy of our time, which pervades our journalism, and lurks under the folds of the drapery of fashion, as well as in the precincts of St. Stephen's Chapel."

After these illustrations of our author's style of thought, we propose to notice very briefly a few of the interesting topics on which he touches. A short notice of the life of Swedenborg is

given, from which it would appear that he was the subject of almost constant hallucinations both of the eye and ear, as he felt bound to reject entirely the theory of imposture. He was accustomed to hold frequent and long conversations both with angels and men deceased. He talked with St. Paul during an entire year; with St. John, Moses, and Luther. He says, "Let any one should call this an illusion, or imaginary perception, it is to be understood that I am accustomed to see them who are perfectly wide awake, and in full exercise of my powers of observation." The reason why the speech of an angel is not heard by the bystanders is, that it "finds entrance into a man's thoughts, and reaches his organs of hearing from within." This or some analogous form of expression, is very common among those who suffer from auditory illusions. Thus the prioress of the convent of Soudum, tormented by the demon Behemoth, heard him speak "par une locution qu'il un faisait dans sa tête."

On the subject of the well-known visions and revelations of St. Teresa, Mr. Madden says:—

"It is impossible for a medical man to read this account (an account of her bodily sufferings before given)—of the occasional falling into a lethargic state, fits of fainting and swooning, violent spasms and pain at the heart, temporary loss of reason, shrinking of the senses, oppression, with a profound sense of sadness, biting of the tongue in many places when out of her senses, inability to swallow any liquid, distortion of the whole frame as if all her bones were disjoined, subsequent inability to stir hand or foot for some time, and a general diffused soreness, so as to be unable to bear being touched—without coming to the conclusion that the sufferer laboured under physical disease of a low nervous or gastric kind, with continuous fever, probably complicated with epileptic tendencies."

Elaborate and interesting notices are given of various forms of epidemic manias; amongst others, of Witchcraft, of Lycanthropy, Epidemic Hysteria, Convulsive Chorea, *Manie de la Danse* amongst the French, the Tarantula dancing-mania of Apulia, the Flagellation mania, and the Migratory Epidemic. The last is thus noticed:—

"At various times in the middle ages, the minds of a multitude of people seem simultaneously to have been affected with this universal feeling of *malaise*, accompanied by an irresistible and unaccountable impulse to go forth and walk out of one's own land and place in society, to move with masses of people with some apparent instinct of a high purpose; at one period they appear, as it were, on a pilgrimage, but without any definite object, or fixed shrine—like the *Rianchi* in the thirteenth century, wandering *en masse* from one end of Italy to the other, making no proclamation of plan or object, but moving onward

with a dim, confused idea, that God's honour was in some way or other to be promoted by these peregrinations."

These migrations are to be distinguished from the Crusades, which were epidemics of another class.

About half of Mr. Madden's second volume is occupied with a carefully-prepared history of the life and character of the Maid of Orleans, Jeanne d'Arc, founded on the work of M. Quicherat, whose researches were undertaken for the Société de l'Histoire de France. The result arrived at appears to be, that Joan of Arc was affected to some extent with thermania—that she was subject from her earliest infancy to illusions and hallucinations of sight and hearing—that the intensity of her enthusiasm projected outwards the promptings of her own mind, so as to give them substantive existence, and that they were acted upon as inspirations. It appears fully proved, however, that her life and morals were perfectly pure and irreproachable, and that her execution was nothing more nor less than judicial murder. Mr. Madden does not reject the idea that she had in some sort a divine mission to perform, as would appear from the concluding sentence of his chapter on her inspiration :—

" Agents of this sort have been used by Divine Providence for great purposes in all times, and in many regions of our globe. . . . With the several Scripture records of inspirations given to women for the accomplishment of great and good designs, the history and mystery of the visions of Jeanne d'Arc may possibly be found to be in nowise inconsistent."—(Vol. ii., p. 226.)

On the subject of epidemic mania in convents, much useful information is afforded in these volumes, showing how, under mental influence, the most extraordinary phenomena were manifested in frail, weak bodies, and how singularly these phenomena coincided in the various places in which they appeared ; also, how very similar they are to the results claimed to be produced by modern mesmerism, such as magnetic sleep, insensibility to pain, clairvoyance, influence over volition, &c. &c. But we must close our notice and extracts, strongly recommending these volumes to the attention of all who feel an interest in the very obscure yet important subjects on which they treat.

ART. IX.—HOMICIDE IN INSANITY.

BY JOHN P. GRAY, M.D.

*Read before the Association of Medical Superintendents of American Institutions for the Insane.**

A DISPOSITION to violence is a common characteristic of mental disease. It is exhibited in every conceivable manner, from harsh words to suicide and the most cruel and brutal murders, and is found in every form of insanity. If, then, among the unhappy phenomena or symptoms developed under the influence of the delusions and hallucinations peculiar to the disease, we meet with a tendency so universal, so destructive of happiness, and so dangerous to society, how important is its careful study, with reference to the welfare both of the patient and the public!

If, however, as some assert, neither delusion nor hallucination is necessary to the development of a tendency to violence; that it may burst forth in its most terrible forms suddenly, without premonition, and even without the accompaniment of apparent physical derangement; that the first and only manifestation of disease may be a blind, irresistible desire to take life,—then the subject is of still deeper and more vital importance, and insanity is invested with a degree of interest which pertains to no other disease. If a passing fit of indigestion, or a slight modification in the character or quantity of the blood circulating through the brain, be all that is required to beget suicide and murder, what a lesson on the frailty of man, and yet, at the same time, how impressively does this sad feature of mental disease teach us the dignity and value of reason!

It is of the first importance, therefore, to know whether these serious consequences are *always* preceded by appreciable physical and mental disturbance, or whether they may appear without either; in other words, whether there is ample foundation, in well-attested facts, for the belief that there is such a thing as a sudden explosion of homicidal impulse, independent of appreciable disease—a moral mania, having for its essence a desire to kill.

We propose, therefore, in this paper, to bring before the profession a series of cases treated in the institution at Utica, for the past seven years; not so much, however, with the view of discussing the question of homicide, but rather as a contribution to the general stock of facts already recorded on this important subject. The cases selected are those which have passed under the writer's own observation, and with the details of which he is

* From the "American Journal of Insanity" for October, 1857.

personally familiar. It may be remarked further, that the experience of a State institution so large as that at Utica (having treated nearly five thousand cases of insanity in a period of fourteen years) must be valuable in this connexion—more especially when it is remembered that, by law, all those in the state acquitted of criminal charges by reason of insanity, as well as those under indictment, and found to be insane previous to trial, are sent, together with a large number of dangerous and homicidal cases committed by justices or by friends. Indeed, the cases of homicide or homicidal attempts coming by order of the courts alone, in a population of over three millions of people, must be a valuable record.

For the sake of convenience, the cases are arranged in three classes:

1st. Those who have committed homicide, and who have been placed in the asylum under an order of the Court, or by friends.

2nd. Those who have made homicidal attempts under circumstances which led physicians and others to regard the homicidal tendency as the distinguishing feature of the disease, and some of which were considered as cases of pure homicidal monomania, and as such were committed to the care of the institution by official orders or otherwise.

3rd. Miscellaneous cases, illustrating certain points having a bearing upon the subject under consideration.

I. Those who have committed homicide.

Under this classification we have a list of twenty-four patients—nineteen males and five females—whose violence resulted in the death of thirty-three persons.

CASE I.—S., admitted May, 1843. Male, aged 32, labourer, no education, no religious belief, a man of bad habits; form of mental disease, chronic mania following prolonged ill-health; killed the adopted son of his brother-in-law by repeated stabs with a pitchfork and knife. The murder was premeditated, well-arranged plans of concealment were laid and carried out, the instruments were carefully washed, and the body buried. His motives were grounded in personal hatred and revenge. He had always borne the reputation of being a bad man. The act was committed in the daytime. Is still in the asylum.

CASE II.—H., admitted September, 1843. Female, mother of a family, aged 44, of common education, good habits, and even temper. Form of mental disease, paroxysmal mania, commencing at the climacteric period. During one of her paroxysms, while in a furiously maniacal state, she cut the throats of two of her children, and attempted the life of her husband.

When homicidal was always suicidal. The act was committed in the daytime. Still in the asylum.

CASE III.—K., admitted May, 1845. Male, aged 40, a cal net-maker, of intemperate habits. Under the delusion that was the object of plots and evil designs, he killed a neighbour wife by stabbing and burning. Act committed in the daytin Is still in the institution, a demented, dangerous man.

CASE IV.—W., admitted August, 1846. Male, aged 25, boatman, no education or religious belief, but of fair morals, a an industrious man. The hereditary tendencies in the case not known. In a paroxysm of violence and insanity, killed man during the daytime on board boat. Was tried and sent the State prison, where he was found to be insane. Had the frequent paroxysms of insanity, in which he made desperate assaults upon several persons. Is still in the asylum, a very violent and dangerous man. His epileptic paroxysms succeed each other at brief intervals, and mark his periods of violence.

CASE V.—K., admitted October, 1848. Male, aged 40 wealthy land speculator, of intemperate habits; was a violent revengeful, suspicious man. At the first outbreak of an attack of acute mania, stabbed a man in the street, in the daytin under the delusion that he was following his footsteps to kill him. Recovered, and eloped from the asylum in 1852.

CASE VI.—B., admitted January, 1850. Male, aged 50, farmer, of violent and ungoverned temper, a drunkard; was laboring under chronic mania, caused by his prolonged intemperance. One morning openly stabbed a neighbour, under the delusion that he was unkindly disposed to him. Was tried, convicted and sentenced to prison for life. Was there found to be insane and sent to the asylum, whence, after three years' confinement he escaped, and died on his way home. Was a very dangerous man, constantly secreting and making instruments with which to kill those whom he disliked.

CASE VII.—F., admitted October, 1850. Male, aged 30, labourer, of good habits, of hereditary taint. Had an attack of acute mania, induced by fatigue and anxiety; the first indication of which was a maniacal frenzy, during which, as a matter of assistance, under the delusion that he was about to be murdered he stabbed two men on the deck of a steamboat. Act was committed in the daytime. Patient recovered, and was discharged.

CASE VIII.—H., Sandwich Islander, admitted November, 1850. Male, aged 30, a sailor, of good habits, educated. His purse was stolen by the steward of the vessel while in port; and under the impression that he was doing right, he stabbed the steward, when an attempt was made to arrest him. In maniacal frenzy he killed two men by stabbing, and wounded many

others; was finally shot down and captured. Acute mania followed. Was acquitted on the ground of insanity. Recovered and was discharged.

CASE IX.—P., admitted June, 1851. Male, aged 51, of intemperate habits; had an attack of melancholia, induced by his vicious indulgences. One morning after breakfast, shot a neighbour, under the delusion that he was plotting against him. Gave himself up to the authorities, evincing no regret or sorrow. Recovered, and was discharged.

CASE X.—N., admitted March, 1852. Female, aged 58, of insane parentage, a worthy member of the Baptist church. Had an attack of sub-acute mania, caused by domestic trouble. In a paroxysm of maniacal passion she killed a neighbour's child by dashing its head against the wall. She was also suicidal. Recovered, and was discharged from Asylum.

CASE XI.—B., admitted April, 1852. Male, aged 32, a gardener, of good habits, inherited insanity from his father. Had an attack of acute mania, caused by domestic trouble, and killed his wife by stabbing, under the delusion that she was not his wife, and was plotting against him. Still in the Asylum, a very dangerous man.

CASE XII.—D., admitted April, 1852. Male, aged 35, a labourer, was an intemperate man, and of intemperate ancestry. Was for some time depressed and suspicious. One morning he went forth deliberately and knocked down and stamped upon a kinsman of his, until he was dead, under the delusion that he was inimical to him. The following day he was seized with acute mania, demented rapidly, and died of general paralysis before the end of the year.

CASE XIII.—D., admitted March, 1853. Male, aged 29, a boatman, of intemperate habits, and of insane parentage; had been in a melancholy, half-demented state for some months. His father went to his room one evening to ascertain whether his son was at home. Having no light, he repeated his name several times. Patient, who was dozing upon his bed, sprang up, thinking his father was shouting for help, seized a club, and encountering him in the dark, killed him by a single blow. Recovered, and was discharged.

CASE XIV.—W., admitted June, 1853. Male, aged 42, a pedlar, of intemperate habits; was demented from long-continued dissipation. He loaded a gun one morning, and under the delusion that he was obeying a command of God, shot a man who was ploughing in a neighbouring field. Was very suicidal, died in the Asylum.

CASE XV.—T., admitted August, 1853. Male, aged 33, a cabinet-maker, of good habits, a Swedenborgian; killed his

brother-in-law with an axe. The act was committed in the evening, and in connexion with some family quarrel. On second trial, after prolonged imprisonment, was acquitted on the ground of insanity. Was subsequently discharged by the court as insane.

CASE XVI.—W., admitted March, 1854. Male, aged 42, farmer, sober and industrious, of a kind and amiable disposition. Hereditary taint in family. Had twice suffered from mental disease. Suddenly, and without assigned cause, became gloomy and depressed; talked much about his soul, and the earthly and future welfare of his family. Read his bible a great deal, and finally secluded himself; and on one occasion prayed for three hours in succession, without rising from his knees. Thought he could look directly into heaven, and converse with the Saviour. Suddenly became composed, took his razor very deliberately and cut his wife's throat to the vertebræ, producing instant death. He then made a similar attack upon his daughter, who, however, escaped from him with the remainder of the family. Patient once sank into profound stupor, refused food, rapidly emaciated and was brought to the Asylum demented. Subsequently recovered, retaining only a dreamy recollection of the homicide. Was discharged.

CASE XVII.—S., admitted May, 1854. Male, aged 56, quiet, industrious man, the father of ten children. Was slightly intemperate, rather reserved in disposition, but kind to his family. Began to complain of intense headache, became jealous of his aged wife, and cross to his children. One morning walked out to the woodpile, procured an axe, returned to the house, knocked down his wife, dragged her to the door, and deliberately cut off her head. The children fled and aroused the neighbours. Patient gave himself up and desired to be hung. On opening the court, was so evidently insane that he was ordered to the Asylum without trial. When admitted was labouring under dementia. Has recovered; seldom speaks of the act, of which, however, he has a perfect recollection.

CASE XVIII.—A., admitted May, 1854. Male, aged 41, shiftless and uneducated, abjectly poor, lived with and was supported by his sisters. Was addicted to the free use of intoxicating drinks; was of insane parentage. Became silent, pale, and emaciated; soon imagined that he was possessed of great wealth, which his neighbours were trying to get away from him, and under this delusion procured a gun and shot one of them. Was brought to the Asylum, and in a few months died of general paralysis.

CASE XIX.—G., admitted August, 1854. Female, aged 35, of an even temper, and gentle disposition. While nursing child

and in rather delicate health, contracted an ungrounded jealousy of her husband. This continued for two years. At times she was also suspicious of and violent towards others. One morning locked herself in the house and barricaded the windows and doors. Attempts were made to gain admission, when, in a paroxysm of maniacal passion, she seized her children by the feet and dashed their heads against the wall, fracturing the skulls of two, of whom one died. She was brought to the institution in a state of dementia, and was subsequently removed to the country house, unimproved.

CASE XX.—T., admitted February, 1855. Male, aged 45, a clergyman, of academic education; of insane parentage, of intemperate habits, and violent, ungovernable disposition. Had an attack of *mania a potu*, during which he made a murderous assault upon his family with a razor. He killed one child, and wounded others. After a trial, in which the jury could not agree, and pending a second, was sent to the Asylum on order of judge. Feigned dementia. He eloped in 1855.

CASE XXI.—L., admitted May, 1855. A labourer, of temperate habits, but of violent, passionate disposition. Became very angry with his wife on account of her refusing to sign a deed of conveyance. Subsequently killed her and three children. Committed the act in the daytime. Does not deny it, but says he has his reasons for it. Is demented. Was long imprisoned before being sent to the Asylum. Has a large scrofulous tumour upon his neck. Says that he has always had it. Is still in the Asylum.

CASE XXII.—E., admitted October, 1855. Female, aged 35, German, religiously educated, and of gentle disposition; sank into dementia after childbirth. Had a delusion that her husband was not really married to her—that he was an adulterer. On his returning from his work at noon, one day, he lay down to rest while his dinner was preparing. Falling into a light sleep, the wife seized the opportunity to cut off his head with a hoe. Is still in the Asylum, demented.

CASE XXIII.—W., admitted March, 1856. Female, aged 27, of insane parentage, religiously educated, member of Episcopal church, of great evenness and gentleness of disposition; was subject to periods of depression, owing to the intemperance of her husband, poverty, disappointment, and home-sickness. Had attempted suicide. One Sabbath morning, and while she was labouring under depression, her husband left to go fishing. In his absence she seized an axe, killed four of her children, and cut her own throat. Is in the Asylum, demented.

CASE XXIV.—L., admitted April, 1857. Male, aged 22, a shoemaker, unmarried, of vicious habits. Procured a pistol, went

to a road which farmers, returning from market, were accustomed to travel; was invited by a man, whom he supposed to be a farmer with money, to ride with him; rode some distance, then got behind him and shot and robbed him. On preliminary trial was ordered to Asylum, where he remains in a state of dementia.

- II. *Those who have made homicidal attempts under circumstances which led physicians and others, in many instances, to regard this homicidal tendency as the distinguishing feature of the disease, and some of which were considered cases of pure homicidal monomania, and as such committed to the institution by official order or otherwise.*

Under this classification twenty-five cases are presented, twenty of which are males, and five females.

CASE I.—S., admitted March, 1846. Male, aged 25, uneducated and vicious. Had epilepsy induced by intemperance. Became quarrelsome, considered himself injured, and in a rage would attempt to stab those whom he disliked. At time of admission to the Asylum, exhibited no marked mental aberration. Soon began to dement; was always a dangerous man; invariably makes his attacks in the daytime, and on persons whom he dislikes, and never threatens or uses violent language. The homicidal tendency is not constant, and is at times attended with strong suicidal disposition, and occurs independently, so far as can be observed, of his epileptic seizures.

CASE II.—R., admitted August, 1847. Male, aged 42, married, the father of five children, common education, not religious, of good moral habits, and an industrious man. Hereditary tendencies not known. For many years had paroxysms of violence, in which he would threaten his family and neighbours; but, upon recovery, was a kind and peaceable man. In one of these periods went to the office of two physicians and attacked them, as he afterwards said, with the intention of killing them, under the impression that they had given him medicines which had injured him. They resisted him, barely escaping with their lives. He was tried, and sentenced to the state prison for the term of six years. Remained for that time in prison, where his attacks of maniacal excitement were frequent, and during which he was violent, attacking those about him suddenly and furiously.

After his return home these paroxysms continued, with the attempts to kill. His physician then detected symptoms of epilepsy, and, on inquiry, ascertained that he had received a blow on the head some years previous, which had left a consi-

derable depression in the occipital region of the skull. He had "frequently thought of operating upon him, thinking it possible that from the blow some portion of the skull might perhaps be pressing upon the brain."

He was committed to Asylum upon an order of the Superintendent of the Poor, and for two years was subject to paroxysms of violence, lasting a few hours, in which he frequently attacked those about him. These paroxysms were usually followed by epileptiform seizures. At other times he was uniformly kind and industrious, and having, during his periods of violence, on several occasions injured patients and attendants, he came at length to anticipate his seizures, and request to be placed in his room, and to have no one approach him suddenly. He experienced at these times pain in the head, a sensation of ringing in his ears, dimness of vision, with a vague idea of impending danger. His violence was occasioned by the delusion that persons were attacking him with the intention of killing him; and on several occasions, while alone in his room, had a distinct sensation of a blow upon the head, when he would immediately begin a furious contest with his imaginary enemies. At the end of six years, during which the violence of his epileptic periods gradually abated, he returned home in a state of partial dementia.

CASE III.—L, admitted December, 1847. Patient was an educated man, of gentle and amiable disposition. When he was about thirty-six years old, became changed in character; neglected his work, wandered about, was depressed, and afterwards morose and irritable. One morning walked out of the house, returned with an axe, and made a murderous attack upon his parents. Was taken to prison, and soon after brought to the Asylum. Was a dangerous man, and for a long while retained the most revengeful and deadly hatred of his parents. Subsequently became profoundly demented, and is now a harmless, inoffensive man.

CASE IV.—V., admitted July, 1849. Male, aged 25, son of a farmer in good circumstances, and an ordinarily intelligent boy. After scarlet fever health was impaired, and at the age of 20 began to be passionate, and to entertain suspicions of friends and neighbours. Continued to grow worse, though worked regularly on farm. One day took a gun and shot at a neighbour, with the intention of killing him. Was arrested, but considered insane, and sent to the Asylum by order of the court. When received was in a state of dementia, which increased gradually, and he was removed, after a period of three years, a quiet, harmless man.

CASE V.—M., male, aged 25, admitted August, 1849. Native

of Ireland, no education, was a boy of violent temper, and early placed in the army by wish of his friends. While there, and without known provocation, stabbed a sentinel with his bayonet and then made his escape, and his friends sent him to this country. He entered the army in this country, and was frequently refractory, requiring discipline. On one occasion he ran his bayonet into a fellow-soldier, wounding him severely but not fatally. He was brought before the proper officers, and discharged from service on the ground of imbecility and insanity. He wandered off, and was placed in an alms-house, where he was very violent and abusive. He was sent to the Asylum on an order of a superintendent of the poor, and was, when received, labouring under dementia. His dangerous propensities continued for some time, but under the progress of his disease he became so inoffensive as to be removed again to the poor-house after two years, where he still remains.

CASE VI.—M., admitted September, 1849. Male, aged 30 married, a lawyer, liberal education, religious, and of irreproachable character. At the age of 25 had an epileptic fit, which was followed by others at somewhat irregular intervals; not, however, impairing his mind perceptibly, though depressing his spirits and rendering him at times irritable. Two weeks before admission, after several fits, became excited and boisterous, and attempted to kill his mother and sister. They fled and closed a door against him, when he spent his fury upon the glass and furniture. He soon became calm, appreciated his condition, and was willing to be confined in an asylum. Remained under treatment for a time, and returned home, but the recurrence of a violent disposition towards his family induced him to request his sequestration. Subsequently he became demented, and died at the close of a series of epileptic convulsions.

While in the Asylum, was once in the medical office, executing a receipt for rent paid by a tenant, when he suddenly seized a weapon, sprang across the table, and attacked the physician, under the hallucination that he was a man who had once defrauded him, and was present to induce him to yield up some claim to property. He subsequently stated that he seemed to see the man distinctly, and that he heard him speak, and make the request. The physician had not spoken.

CASE VII.—C., admitted March, 1851. Was an uneducated vicious, intemperate man, of decided hereditary taint. One day, while disputing with his father about some trifling matter, endeavoured to kill him with a spade. Jury found him guilty of an assault with intent to kill, but subsequently he was sent to Asylum. Was labouring under dementia, and died in the institution in 1857.

CASE VIII.—T., admitted April, 1851. Wife of labourer, second husband, member of church, good habits, common education, mother of three children. After birth of last child general health impaired and mind somewhat disturbed. Partially recovered; nursed her child sixteen months; was passionately attached to it; attempted to wean it, and in a few days was seized with acute mania; became violent toward husband, and abusive of her child. Tried to drown her second child; subsequently stripped it and put it under the hot stove, and took the eldest into the garden and attempted to smother it by pressing its face into the ground. Was furious on the way to Asylum, and attempted to jump from steamboat into the lake. Recovered, and was discharged in 1852. Retained a dreamy recollection of her conduct.

CASE IX.—H., admitted November, 1852. An educated woman, and mother of a large family. Was of an amiable and gentle disposition, but sank into melancholia at the climacteric period. There a strong hereditary taint in her family. One night she requested to sleep at the front of the bed, which was permitted. On retiring, she drew a small stand to the bedside, and when she supposed her husband asleep, cautiously took a razor, which she had concealed in a drawer of the stand, and drew it across his throat. He, however, had not been asleep, and resisted. She then cut her own throat. She never spoke afterwards, but continued very suicidal to the day of her death, which occurred about six months afterwards.

CASE X.—M., admitted June, 1852. Male, aged 30, a labourer, of intemperate parentage. Was a bad man and a drunkard, but generally provided well for his family, and lived peaceably with them. Had complained for six or eight months of general indisposition; was subject to gastric disturbance; was depressed in spirits and wakeful at night. Two months before admission, without any apparent motive, he gave his wife a large dose of opium. Observing its effect upon her, he ran to a neighbour, told him that he had poisoned his wife, and insisted upon being killed. On his neighbour's refusing to comply with this request, he seized a razor and cut his throat. His wife was restored. He was brought to the Asylum, gradually sank into profound dementia, and died. Always spoke of his family with much affection and interest.

CASE XI.—D., admitted September, 1852. Female, aged 52, wife of a farmer, common education, religious, good habits, hereditary, mother insane for many years, and other members of maternal branch. Late in life married a widower with several grown-up children. Had occasional domestic troubles. At climacteric period became depressed in spirits, with impaired

general health ; sank into a state of melancholy. Thought he husband desired to get rid of her. Secluded herself much of the time, and frequently laid awake during the night. One mornin followed her husband into the wood-house, seized an axe, stru him on the head and felled him. Subsequently inflicted numerous severe blows about his head and face, cutting him horribl She then gave herself up and requested to be punished. Sai she had done an act against the law, but had done no wrong that her husband was in league with the devil, and had sold h to him ; that on several occasions in the night she had observe them talking together, and that the night preceding the mornin of the deed, the devil had made a large fire in the centre of th room and kept it burning a long time, waiting for her to go t sleep ; that during this time her husband pretended to be asleep but at the same time she heard his spirit talking and laughin with the devil and arranging her destruction.

This woman rapidly demented, but retained her delusion. She was subsequently removed by her family, and become profoundly demented.

CASE XII.—S., a male, aged 25, a farmer's son, was admitted to the Asylum in December, 1852. There was no inherited disposition to insanity. At the age of eighteen had an attack of mania, from which it appears he recovered but partially, y went to school for two years, when he had a recurrence of disease. Was subsequently subject to paroxysms of mania, to the time of admission above mentioned. During one of his paroxysms he attacked his father with an axe, and the same day set fire to his father's barn. On admission, was labouring under dementia—was silent, easily controlled, never spoke of his family, when his father or mother visited him usually answered questions, but took no interest. Never would disclose the reasons for his violent conduct. Worked steadily, and gradually became more and more demented, and died in 1857.

CASE XIII.—G., admitted April, 1853. Male, aged 33 ; man of good habits ; father was insane. Began to talk of his troubles, and accused his brother and sister-in-law, with whom he lived, of being their cause. Under this delusion made a murderous assault upon them with an axe. Was brought to the institution slightly demented, and after a short time was removed but his feelings towards his brother and sister-in-law at once returned, and he was brought back. As his disease progressed the homicidal tendency disappeared.

CASE XIV.—F., admitted September, 1853. Male, aged 45 was an eccentric, morose man, and occupied, entirely alone, a isolated farm-house. Began first to shoot at every one who passed his house. Blocked up the road, which happened to be

an unfrequented one. Thought that mankind wished to deprive him of his little farm. He wounded no one fatally. Is in the Asylum, and retains the same delusions. Is quite demented.

CASE XV.—G., admitted November, 1853. Male, aged 27, German, member of Lutheran Church, of good education, a musician by profession; was married to a lady of great personal beauty, his superior physically, and to whom he had been long and tenderly attached. Some months after marriage he made an attempt to push her into the canal, and also the river. After several attempts of this kind, she demanded his reasons for such strange conduct. He burst at once into a paroxysm of weeping, mingled with the fondest expressions of endearment, and an obscure reference to the bliss of heaven. She concluded that he was becoming insane, and that, under some delusion, he desired to kill her, and afterwards take his own life. Wishing to avoid the shame and despair of such an exposure, she courageously determined to keep the secret, and rely upon her own strength and presence of mind to prevent the accomplishment of his purpose. He was paler than usual, and suffered from headache, but was able to discharge his accustomed duties. He continued his attempts, his wife searching him every night, often finding a brace of pistols, a razor, or a carving-knife, then locking the door and securing the key. It occurred to her that travelling might benefit him, and they accordingly started to visit some friends at the West. On board the steamboat, crossing Lake Erie, he was most persistent in his efforts to induce her to walk with him on the upper deck, and did not cease begging to have her do so until midnight, and then cried himself to sleep. Having nothing to do, his attempts only increased in frequency. They retired one night, after a most careful search, as usual; when about half asleep, she was aroused by feeling the edge of a razor drawn across her throat. By combining great presence of mind with all the strength she could summon, she escaped with an extensive but fortunately superficial wound; and, to use her own language, "thinking it about time," she brought him to the Asylum. There, one of his first acts was to conceal a razor. His disease was incomplete dementia. He soon recovered, and subsequently acknowledged that his sole and engrossing aim was to kill his wife, and then himself, to secure the mutual enjoyment of heavenly bliss; thinking, as he expressed it, with eyes dancing with delight, "if we were so happy, happy here, what would it be in heaven!" His object in concealing the razor was to cut his wife's throat the first time she should be permitted to visit him, and then his own.

CASE XVI.—N., admitted November, 1853. A clergyman, aged 29, of studious habits. From long-continued mental appli-

cation, as well as from confinement to an ill-selected and scanty diet, a freak of his eccentric mental constitution, began to experience a gradual impairment of his physical health, and to entertain delusions of the nature of suspicions relating to his clerical duties and his brethren. Attended a meeting of the synod, and on his return his friends noticed him to be labouring under considerable mental disturbance. Declared that on account of his youth he was the object of distrust. Suspected his neighbours desired the separation of his wife from himself, and that they were endeavouring to poison his family. During his residence in the Asylum the delusions connected with those with whom he was associated led to frequent outbursts of violence and rage. Health gradually improved, and his mental condition so altered that his wife and friends removed him. Soon manifested evidence of a return of his mental disease. Began to threaten his wife and family, and they left him through fear, and he remained with his mother. Without assigning a motive, he procured a knife and attempted to kill her. Was arrested, and after a brief confinement in jail was again removed to Asylum at Utica, where he remains, his condition unimproved.

CASE XVII.—T., admitted December, 1853. A young man, aged 25, of good habits and gentle disposition; lived with his widowed mother, to whom he was tenderly attached. He had at one time an attack of mental disease, had recovered, and remained well for many years. He seemed a little restless; left home, and after several days' absence returned with a gun, which he deliberately loaded, and attempted to discharge at his mother. The cap missed, at which he became so enraged that he broke the gun into fragments. Was secured and placed in jail. His conduct was variable; he was at times noisy and excitable, after which he would become quiet; was filthy in his habits, and refused to walk, talk, or eat. Made several attacks upon his attendants. While under observation in the Asylum he continued much in the same condition as is described above. After a residence of two years, during which time he had not been known to converse or express any wish, requested permission to write to his mother. The letter which was written was both appropriate and affectionate. From this time his improvement was gradual, and he was discharged after a residence of three years. The delusions this patient had so long entertained were never unfolded.

CASE XVIII.—B., admitted June, 1854. A merchant, aged 68, married, of good education, but of intemperate habits. Began to manifest evidences of insanity six years prior to admission to the Asylum. Hereditary predisposition to mental disease existed in the paternal branch of the family. The early indications of

the disease were found in his restlessness, and peevishness of manner; disposition to engage in law-suits; mismanagement of his business, resulting in its derangement and in great pecuniary losses; and in his suspicions of those about him. Under the delusion that he was about to be robbed, he procured arms, and on slight provocation discharged his pistols, which he at first loaded with powder, then with paper balls, and eventually with shot, at passers-by. On being arrested and searched, two revolvers, heavily charged, were found upon his person. Had always enjoyed an excellent reputation, but had gradually become passionate, and acquired exalted ideas of property. When it was first proposed to him to go to an asylum, he declared he would commit suicide, but afterwards went without difficulty and willingly. After admission became gradually quiet and easily controlled, and, after four months' residence, returned to his family.

CASE XIX.—C., admitted September, 1854. A farmer, aged 56, of limited education, intemperate in his habits, as well as eccentric and passionate. Gave indications of insanity two years prior to admission. On several occasions attacked his neighbours without provocation. Steps were taken to place him in an asylum, but he made his escape. Returned after an interval, and continued quiet till about one week before his reception, when he attacked a neighbour with a club, injuring him severely. Subsequently attempted to shoot his wife. She escaped by running away. He laboured under the suspicion that plots existed against his life and property. Since his admission into the Asylum has had an apoplectic seizure. He rarely speaks to any one, but is disposed to seclude himself, and devotes the greater portion of his time to reading. He is regarded as a dangerous man.

CASE XX.—L., admitted October, 1855. A farmer, who had been known as an intemperate, violent, and dangerous man for fifteen years, during the greater portion of which time he had supported himself and accumulated a small property by his industry. Began to manifest indications of insanity about four months prior to admission. His violent conduct was such as to excite the apprehension of persons having occasion to pass his house, as well as his neighbours, whom he was in the habit of threatening with violence. On several occasions fired at persons who passed near his house, under the delusion that he was to be attacked and robbed of his money, and an invention for exhibiting a perpetual motion, which he supposed he had perfected. An officer, with the assistance of a number of persons, went to the house for the purpose of arresting him. It had been barricaded, and a defence prepared with loaded pistols and guns, a hand-

spike, clubs, a basket of stones, an axe, and a large pot of boiling water. He yielded after a desperate resistance. Was confined for nine months, gradually overcoming his delusions, when friends and neighbours removed him.

CASE XXI.—W., admitted August, 1855. Aged 42, mother of several children, of liberal education, member of church, good habits, strong hereditary predisposition to insanity in father. After birth of last child was irritable, at times maniacal, entertained unfounded suspicions of her husband, neglected domestic duties, secluded herself. Secreted a carving knife in the night attempted the life of her husband. Labouring with chronic mania. Is still in Asylum.

CASE XXII.—W., admitted December, 1855. A carpenter, aged 35, of intemperate habits and bad morals. Gave evidence of insanity nine months previous to this time. Insanity hereditary on paternal side. Became violently insane; fired a pistol at a young man in the street, and subsequently shot at two persons riding in a buggy, and made other homicidal attempts. When arrested had a heavily loaded pistol, a hand-saw, and a square in his bed with him, with which he made a desperate resistance. He entertained delusions concerning his property and the chastity of his wife. Returned to his family in July, 1856.

CASE XXIII.—W., admitted June, 1856. Aged 42, wife of a captain of one of the Hudson River boats. She was a lady of high intelligence, much respected for her amiability and virtue. For many years a worthy and consistent member of the Episcopal church. She was of healthy parentage, though one parent, an uncle and two aunts had been insane. Her domestic relations had always been very pleasant.

She resided with her family during the summer of 1855 in a malarial district. Her second child was seized with intermittent fever, and died in August; her eldest son, to whom she was passionately attached, also suffered severely from the disease. In the following month had a series of convulsions which led to amaurotic blindness. The entire winter was spent in the most devoted and assiduous attention to this child, under the hope, held out by the physician, that his sight would return to him when he recovered his usual health. After months of care and nursing he eventually regained his previous flesh and strength but was still unable to see.

On the opening of navigation, she left home with her husband to submit his case to the oculists of the city of New York, confidently believing that their great experience and superior skill would restore his sight. They, however, pronounced him hopelessly blind. She returned home overwhelmed with grief, that she had loved her children too fondly, and in her engi-

affection for them had neglected her duty to her God, who, to punish her idolatry, had taken one away from her, and smitten the other with blindness. In her sorrow she sought the advice and counsel of her pastor, presented to him her view of the affliction, and suggested fasting and prayer, to which she understood him to assent. She accordingly fasted for three days, spending most of the time in meditation in her own room, in reading the Scriptures, and prayer. She was more cheerful on the evening of the third day, but passed a restless night, and on the following morning was more uneasy, felt feverish, and, in the opinion of a neighbour, who called upon her, seemed to talk more than usual, and in a hurried, excited manner. During the remainder of the week she was as cheerful and composed as she had been at any time for some weeks previously, though feeling faint from her prolonged abstinence. On the morning of the following Sabbath she attended church and listened to a sermon, the theme of which was the sacrifice of Isaac by Abraham, and returned home greatly excited. At evening service, as was occasionally the custom for females in her church, she arose, spoke of her afflictions, the light in which she regarded them, &c. Becoming somewhat excited, and weeping violently and hysterically, she was advised to return home, and did so, with one of her friends, her husband at this time being absent in command of his vessel. She could not distinctly recall the state of her feelings, nor how she rested during this night. On the following morning she was detected approaching her children's bed with a large carving-knife in her hand. She was greatly agitated, but at once acknowledged her intention of sacrificing her children, in order to show her submission to Divine will, as Abraham had. Her friends explained to her the manifest insanity of such an idea, and she came to the institution voluntarily. She was pale and nervous, trembling whenever addressed; but under the use of tonics and laxatives rapidly recovered, and soon returned to her family.

CASE XXIV.—W., admitted August, 1856. Male, aged 35, of temperate habits, and a professor of religion. Having purchased a farm, found himself embarrassed in meeting his pecuniary obligations, and applied himself very closely to work. About two months previous to his admission his wife noticed his actions to be unusual, and that he worked and slept irregularly. In this state he undertook the care of a sick person, which impaired his physical strength. Two weeks prior to admission he took one of his children and a dog, and proceeded to the woods, where he hung and quartered the dog. Intended to proceed in the same manner with the child, but, under the impression that he had brought the wrong one with him, returned to his house

for another, deliberately telling what he had done and intende to do. His wife secured the children, and he was placed i security till his removal to the Asylum could be effected. Th delusion under which he laboured was, that he was directed b God to exhibit a proof of his religious devotion. He remaine under treatment seven months, and was discharged in his usu health.

CASE XXV.—S., admitted April, 1857. Male, aged 3' farmer, member of the Methodist church, industrious in habit and of good morals. Showed indications of mental disease on year prior to admission. There exists hereditary predispositio Nine months prior to reception began to neglect his farm an family. The greater portion of the time sat in the house an read the Bible, seldom conversing with any one, and objected t his food for days together. Burned candles during three successiv days and nights. At about two o'clock one morning he left h wife asleep, as he supposed, and went to his barn, killed a heife and drew it into a field. He then returned to his wife's chambe and, after satisfying himself that she and the children were aslee fastened the doors and left the house. From the house he wa to the barn, and slaughtered a number of sheep, and agai returned to the house, with an axe, with the intention, afterwar avowed, of killing his entire family. In the meantime his wi had been observing his movements, and had fled to a neighbour house. He submitted quietly to be taken to the county recee tacle for lunatics. When his wife visited him, several day afterwards, he made a violent effort to attack her. He refuse food, but usually managed to secrete a portion of that broug to him, and partook of it unobserved. For a period of thr months after his admission to the Asylum he maintained a un form silence. He is now improving, and writes affectionate to his family. He has never disclosed the delusions under whic he has been labouring.

III. *Miscellaneous cases, illustrating certain points having bearing upon the subject under consideration.*

CASE I.—S., admitted August, 1854. A farmer, aged 3' married, three children, a member of Baptist church, academi education, of good habits, in good circumstances, an honest, i dustrious man, exceedingly kind in his family, and general respected. His maternal grandmother and grand-aunt and tw maternal uncles were insane. His great-grandfather, gran mother, and an uncle committed suicide, and another uncle a tempted it. This man has always had a rather delicate constiti tion, though he has rarely been sick beyond an occasional attac

of dyspepsia. Is generally quiet and reserved, though not unsocial in his habits. Previous to admission, laboured beyond his strength, and began to feel depressed. Thought his family would come to want, and that everything was going to destruction. Still, however, attended to his business affairs. Four weeks before admission he suddenly left his house. His wife followed and he returned. Four days afterward he was missed, and, after several hours' search, was found in a wood, near the house, lying upon the ground, and insensible from loss of blood. He had made several incisions in his neck, and opened a vein in his arm. When revived, he would give no account of himself, but soon afterward told his wife, while watching him at night, to send him to the Asylum, or he might do her some injury. He insisted upon this, and was brought to the institution.

At this period he discovered no delusions, but at times was possessed with a strong desire to kill his family and himself. He felt the approach of these paroxysms, and informed those about him of the fact. At these times he was usually sedate and secretive, with flushed face, eyes sparkling, pleasant and bland in manner, bowels constipated, pulse somewhat accelerated, skin natural, urine scanty, appetite good.

These paroxysms usually continued three or four days. At first they occurred at intervals of two or three weeks, and as he improved in general health became less frequent, and in five months disappeared. He remained in the institution ten months, and left in excellent health of mind as well as body.

After recovery the man gave the following account of himself. For several weeks preceding the attempt at self-destruction he felt oppressed, had pain in his head, and at times confusion of thought. Things about him began to appear gloomy, and at length he became very melancholy. He remembered the conduct of his ancestors, and determined not to entertain the idea of the act which had terminated their existence. He had never spoken to his wife of his hereditary tendency to insanity, but had thought of this in the education of his children. One day, while walking with his children in the orchard, he suddenly had a sense of faintness and giddiness, and sat down. He also felt a throbbing in his head. At the time he had no thought of suicide, but determined to go into the house and tell his wife of his situation and feelings. He did not find her, and while alone it occurred to him that he ought to kill himself. Going where his razors were kept, he took one, but immediately put it back, determined to resist, and ran out of the house to the place where he was found. There he was so overcome with the thought that it was his duty to kill himself that he yielded. After his recovery from the effects of this attempt, the impression that he ought to

take the lives of his wife and children and himself became at times so strong that he feared he should do it, and requested to be taken to the Asylum.

After several months his wife visited him, and was anxious to take him home. He was, however, unwilling to go, as he did not feel entirely natural at times, and feared that his return might again develop the dreadful propensity. At the end of ten months from his admission his wife again visited him, and after remaining in the city three days, he seeing her daily, and experiencing no unnatural feelings toward her, he returned home, where he has since continued well and happy.

CASE II.—S., admitted July, 1856. Aged 51, married, a physician, member of Baptist church, and of good moral habits. Mother was hysterical. Sister has long been and is now insane. When young was addicted to self-abuse. Always somewhat hypochondriacal. In 1849 had an attack of cholera, which left him with permanently impaired health. At four different times, while suffering from indigestion, felt impelled to kill his children. To relieve his sufferings he was accustomed to abstain from food, and on some occasions fasted from one to sixteen days, taking only a little at long intervals. At such times he was in great mental agony.

About seven months before admission, and during a period of abstinence, he was retrospectively his life, and recalled the following trifling incident. In youth he once, with others, in jest, threw an apple paring over his head, which in falling was, by popular impression, supposed to form the letter of the alphabet commencing the name of his future wife. He now remembered that this letter was not the initial of his wife, and therefore he had married the wrong person. He immediately resolved to kill his wife, and the impression increased that it was his duty; "something seemed to say, Kill her, kill her," and he began to fear he should. He appreciated the nature of the crime, and felt that it was in opposition to all the convictions of his life; yet it seemed his duty. In great distress he communicated his fears to his family, and eventually left home and remained away five months. After his return the same unhappy impressions came upon him with increased force. He feared he should destroy his whole family, and requested his son to chain him at night. His son complied with his request, and he felt more comfortable. In a few days he urged his son to keep him constantly chained or he would certainly kill his family, and then destroy himself. He considered himself a lost man, and given over to the worst passions. For ten days before reception was constantly chained, except while taking his meals, and seemed at times in great agony when considering his condition.

One afternoon, while walking through the room, told his son his conscience was gone, and he would now kill his wife and daughter; but refused to disclose the proposed means. The same afternoon made an unsuccessful attempt to cut his throat. Paroxysms of excitement occurred at irregular intervals.

His domestic relations had always been pleasant, and he still has the most kindly feelings towards his family. When asked if he did not desire to get well, replied, "If I should get well, it would only be on the condition that I then return and murder my family, and cut my own throat. Now I dare not kill myself, because I am commanded first to kill my family." He complains of various peculiar sensations—as though the back of his head was pressed, and of pain running up his back and into the base of the brain, and then spreading out in every direction, sometimes as though fire was flashing through his brain. Form of disease, dementia, which increases. Still retains the idea that he must kill his family,

CASE III.—L, admitted November, 1855. Male, aged 58, married, a farmer, well educated, member of church, and of good moral habits. Received an injury to the spine, which affected his general health. Began to entertain suspicions of those about him. Thought that slanders calculated to injure him were being circulated; that people pursued him, and often declared he heard voices near him. Became much excited, and secured his house against robberies, which he constantly anticipated would be undertaken. These unhappy feelings continued until he at length contemplated suicide as an escape. It then occurred to him that if he did this his wife would be left to cruelty and outrage. He therefore determined to kill her first. This idea became so pressing that, fearing he could not resist it, he communicated his apprehensions to a labouring man, and employed him to sleep in a room communicating with his own, instructing him to enter if he should hear any struggle, and prevent the commission of crime. This watchfulness over himself he continued for a long time, against the remonstrances of his wife, who knew nothing of his murderous feelings, and to whom he declined giving reasons for his conduct. He requested to be brought to the asylum, where he subsequently declared the reasons for this and other acts incomprehensible to his friends.

While in the institution he manifested at times extreme mental distress, accompanied by a disposition to homicide, as well as suicide. The former was incited by his delusions, which were intimately associated with those about him. During his treatment, for a period of five months, the violence of his disease gradually abated, and he returned to his family, resuming the

entire management of his affairs, which he continues to the present time.

ANALYSIS OF FIFTY-TWO CASES OF INSANITY MARKED BY A DISPOSITION TO HOMICIDE.

Sex.—Of those who committed the act, nineteen were male and five females; of those who made unsuccessful attempt twenty were males and five females.

Habits.—Of the entire number (fifty-two), twenty-three were intemperate, or vicious, bad men, and twenty-nine were of unexceptionable character and habits.

Hereditary Predisposition.—In twenty-one of the fifty-two cases there existed a marked hereditary predisposition, in nine no such predisposition existed, and in twenty-two no facts touching this point were ascertained.

Mental Disease.—The form of mental disease was acute mania in fourteen cases, sub-acute mania in three, paroxysmal mania in two, chronic mania in four, dementia in twenty-four, melancholia in four, mania à potu in one. Four of the cases of mania and one of dementia were accompanied by epilepsy.

Time.—Twenty-two of the twenty-four homicides were committed in the daytime, the remaining two in the early part of the evening. Of the twenty-five attempts, twenty-one were made in the daytime, two in the night, and two both in the day and night.

Object of Attack.—A father was the victim in one case, brother-in-law in one, a husband in one, wives in four, children in ten, a cousin in one, neighbours in four, neighbours' child in three, and entire strangers in seven cases. In nearly the same proportion, the immediate relations of the patients were objects of attack in those cases in which the attempt was successful.

Suicidal Disposition.—In ten of the fifty-two cases a suicidal tendency accompanied the disposition to homicide.

Commitment to Asylum.—Of the twenty-four homicides, six were acquitted by the courts before which they were arraigned on ground of insanity, and ordered to the asylum; or found guilty, but sentence was suspended; four were sent on preliminary trial; six without any criminal proceedings were placed in the asylum by their friends.

Results.—Of the twenty-four patients who committed homicide, seven recovered, eleven are unimproved, two eloped, and four have died. Of the twenty-five patients who were prevented from carrying their homicidal purpose into execution, six recovered, thirteen are unimproved, and four have died.

Arranging these cases under Dr. Bucknill's very convenient modified classification of Esquirol,* we have the following result :—

1. "Those wherein the crime has been occasioned by delusion, and no reasonable person can doubt or object to the irresponsibility of the offender." In this class we have thirty-four of the fifty-two cases.

2. "Wherein the offender, though suffering from cerebro-mental disease, has committed the crime under the influence of some motive not of a delusive character." In this class we have seven of the fifty-two cases.

3. "Where with general symptoms of cerebro-mental disease neither delusion nor motive for the crime are discernible." In this class we have eleven of the fifty-two cases.

Homicidal monomania is one of those unhappy terms in medicine which, while it aims to express the character of the peculiar cases intended to be included under it, is rather the expression of a theory never yet fully established. Esquirol, in his classification, regards it as a partial alienation, and divides the cases generally into homicides committed or contemplated under insane convictions, the monomaniac being influenced by an irrational motive, and always presenting unequivocal indications of a partial derangement of the understanding and feelings; and homicides committed or attempted under a blind, irresistible impulse to the commission of murder, the monomaniac displaying no perceptible disturbance of the understanding or feelings, and his motives not acknowledged or discoverable.

Pinel says, "There are madmen in whom there is no perceptible aberration of the intellectual processes, of the perceptions, judging faculty, imagination or memory, and yet a perversion of the manifestations of the will in a blind impulse to the commission of violence and bloodthirsty rage, without any assignable dominant idea, or any delusion of the imagination which could cause such a propensity."

The opinions of these distinguished authorities on this subject have been entertained and reiterated by subsequent writers down to the present time, although the existence of the impulsive variety, not fully established even in its day, has been more and more doubted, until it has enrolled against it many of the most able writers on the jurisprudence of insanity in Europe and America. Among those who either reject or question the whole theory of moral insanity, under which this monomania is placed, are found the names of Heinrich, Leubuscher, Winslow, Mayo, Bucknill, and Wharton.

* Bucknill on Criminal Lunacy, page 100.

That in insanity there is developed a disposition to the extreme violence of murder, and that this disposition is at times irresistible, no one familiar with the insane will for a moment pretend to doubt; and from such observation as cases have thus far afforded, we cannot but adopt the opinion that the morbid tendency to homicide is but one of the many violent impulses of the insane state—one among the many manifestations of perverted instinct exhibited *in* the disease; and that the homicidal act, in irresponsible persons, generally, if not always, has for its origin and development such motives or disturbance of feelings as usually influence the insane to other carefully planned or sudden acts of violence; and that a full and reliable history of cases of sudden or more or less persistent homicidal propensity will reveal the fact, that, *in all instances*, anterior to any such impulse, there existed for a time *physical disease*, or at least perceptible disturbance of the physical health and a change in the mental condition; or, in other words, *a state of insanity*.

In noticing Esquirol's classification of homicidal insanity, Dr. Bucknill, editor of the *Asylum Journal of Mental Science*, one of the ablest modern writers, and with a large practical experience of the insane, remarks:—

"The existence of the third class, in which the impulse is sudden and unreflected on, admits of grave doubt. The testimony in favour of the existence of such a variety is very scanty and unsatisfactory: and it is improbable that cerebro-mental disease can develop itself in so rapid a manner. It is probable that the cases of insanity which have been placed under this head were less recent and sudden than they were supposed to be. The earlier stages of diseased feeling had been unobserved by others, and unacknowledged by the patient."*

On the use of the term "impulse," the same author says:—
"It conveys the idea of force communicated instantaneously, a rapid motive; whereas the morbid desires under consideration are not of instantaneous production, or of rapid growth. They arise from a chronic disease, and are resisted up to a certain point; sometimes they are altogether and successfully resisted; sometimes, unhappily, they prove too strong for the power of the will. In order to establish this form of insanity, the existence of a diseased emotion must be proved. The will itself is a faculty so simple and undecomposable that it may be doubted whether it can ever lapse into a diseased condition."

Mr. Wharton, one of the ablest American writers, in his recent valuable treatise on Medical Jurisprudence, uses the following language:—

"The term monomania, however, is only admissible in so far

* Bucknill on Criminal Lunacy, page 83.

as it designates certain fixed objects, towards which the ravings of the maniac are directed, and which supply the apparent motives of his actions; *it is not to be supposed that a single impulse is diseased, while all the other functions of the mind retain their healthy action.* While the entire intellect enjoys sound health, there is nothing in which a morbid desire of theft, murder, &c., could originate; and such a phenomenon is a psychological impossibility, and the assumption of such requires a psychological contradiction. A mania without delirium, a mania without a morbid participation or disturbance of the perceptive faculties, is, therefore, out of the question; as a desire to injure or destroy is impossible without an act of the mind by which this purpose is entertained, and as reason and understanding are alike disordered, whether they insinuate a wrong motive for the morbidly conceived purpose of the act, or whether they entirely omit the suggestion of any reason whatever." Again: "Where there is no will, but only a blind impulse, *a perversion of the manifestations of the will is not to be supposed.*"*

Esquirol's class, then (commonly designated as "impulsive homicidal mania"), in consequence of its tendency to embrace within his definition of it, and therefore to shield from punishment, a great mass of crimes of the most atrocious and appalling character, should, notwithstanding the justly exalted reputation of its author, be exposed to the test of the most convincing facts and experience before it is allowed to stand, especially in the criminal tribunals, as an authorized and distinctive classification of insanity. That such a form of insanity has been enunciated by Esquirol, or by other acknowledged authorities in the profession, is not in itself an evidence of its real existence. Errors, in medical science as well as in other sciences, creep on from generation to generation, and even become fortified by time and tradition, until they are finally exposed by a series of facts and observations, carefully analyzed and collated, which fix the truth beyond any reasonable cavil.

Violence against the person and against property is now so prevalent, that we should be extremely cautious of recognising any doubtful form of insanity that will ever shield it; and unless we know, by accurate inquiry and observation, that some form or other of physical disease, remote or direct, has produced a *state of insanity*, it is not just to society to claim for any homicide, or other act of violence or wrong, the protection of such a defence. The closer accuracy of investigation into the history of cases which is now demanded, and which is bestowed by a multitude of observers, certainly shows, on a careful analysis of its results,

* Wharton and Stillé's Medical Jurisprudence, page 145.

that many cases which might heretofore have been classed as "impulsive homicide" do not justify the epithet of "impulsive." Some are *homicidal* in the guilty sense only, and others are *homicidal* as a result of insanity in its proper and common meaning, as understood by the law and conceded by the popular sentiment. More accurate information and more thorough observation might, and probably would, have detected, in most cases intended by Esquirol to be comprehended in his "*impulsive*" class, such a state of present disease, or of long-standing insane tendencies, as would, in his own mind, have resolved this class into some other of distinct and well-acknowledged insanity, not at all (in his sense of the term) impulsive; or discovered such a state of evil habitudes as would have thrown them into the class of criminals deserving of no particular clemency.

The cases we have submitted seem to favour these suggestions and conclusions; and the facts, we trust, will aid in shedding a more certain light upon a subject often obscure and perplexing, and confessedly of the highest moment to individuals as well as to society.

ART. X.—THE JURIDICAL SOCIETY, AND THE CRIMINAL
RESPONSIBILITY OF THE INSANE.

(FROM A CORRESPONDENT.)

No well-wisher to his species can fail to rejoice that the ice which divides the medical and legal professions on the subject of the Criminal Responsibility of the Insane, has at length been broken. It were hopeless to expect that the imperfect expositions of what they imagine to be the views entertained by medical men on the subject of insanity, that barristers are in the habit of making on occasions when they defend prisoners charged with criminal offences, could ever dissipate the dense obscurity which surrounds these subjects in the public mind. The legal profession generally, and especially the judges, have so little practical acquaintance with insanity, that their minds are absolutely unable to comprehend vast truths which are familiar enough to medical men. Examinations in courts of justice are peculiarly unfavourable to the diffusion of just ideas on these matters, and the medical witness consequently gives his testimony amidst an amount of prejudice, arising from ignorance, which is too often fatal to the best interests of humanity and of justice. The existence, then, of the Juridical Society, composed as it is of the most eminent members of the legal profession, and of a few other persons distinguished for their attainments in literature and

jurisprudence, is a fact calling for devout thankfulness on the part of those who look for free discussion as one of the best means of eliciting truth and of diffusing knowledge. Monday, the 14th of December, will henceforth be considered a great day in the history of criminal jurisprudence; for upon it there met together a large number of eminent lawyers, and eminent medical men, to discuss the subject of the criminal responsibility of lunatics. Dr. Forbes Winslow read a paper on "the Doctrine of Responsibility in Cases of Insanity connected with alleged criminal acts," which was followed by an interesting discussion, in which the Vice-Chancellor, Sir John Stuart, who was in the chair, and Mr. Baron Bramwell, took an active part. We desire, in the following remarks, to direct the attention of our readers to what we conceive to be grave and fundamental errors in the reasoning, especially of Mr. Baron Bramwell, on that occasion—because, if our views are correct, the doctrines laid down by the learned Judge strike at the root of the theory upon which all punishment is based. If Baron Bramwell be wrong, then are his errors the most serious and vital that it is possible to conceive in one whose function it is indeed to administer the law, but who would very imperfectly fulfil the duties of an English Judge if he did not also endeavour to improve the law. We have no reason to suppose that the learned Judge is not sincerely desirous to amend what may be defective in the laws; on the contrary, his frequent attendance at the meetings of the Juridical Society shows a desire to advance the science of jurisprudence, which cannot be too highly appreciated by the public. We shall endeavour to reproduce the chief arguments of Baron Bramwell with scrupulous accuracy, and we have no fear of not doing so correctly, for his words fell with painful distinctness upon our ear, and have been very faithfully reported in some of the daily papers. It would be almost an insult to assure the learned Judge that our remarks are made in a spirit of sincere and profound respect for his judicial position and attainments. The truth is that at which we aim, and we are sure it is the truth alone that Baron Bramwell seeks.

The learned Judge observed that "the question to be discussed was not the relative amount of pity which we should feel for the sane or the insane, but how is the law to deal with the commission of an act which it prohibits? To solve this question, it is necessary to go back to the true theory of punishment, which is, that pain being in itself an evil, society has no right to inflict it upon an individual, except for the purpose of preventing crime, by the fear of it on the individual punished, and by the spectacle of it on the rest of the community. The *certainly*, therefore, with which punishment follows crime is of the last importance in teaching men to respect the law, and to abstain from breaking

it; for since the law threatens all mankind, it would be a mere *brutum fulmen* if it did not also punish those who violate it. The madman, amongst others, is threatened by the law; why then should he escape if he infringes the law? and why destroy that certainty of punishment following crime which is the very essence of its preventive power? For his part, he could conceive an argument being maintained to show that even idiots should be punished when they break the law; but in such an opinion, if held by any one, he did not share. If you do not punish the madman, you hold out a premium to the commission of crime; for every man would calculate that he would be fortunate enough to escape by some one proving that he was mad, on the same principle as that on which people lead a forlorn hope, or put into a lottery, not calculating the chances against them, but trusting that they will be the fortunate ones to survive or to win the prize." Baron Bramwell made some further remarks in reference to cases which he had tried within the last two years, and also enunciated the astounding opinion that he doubted the existence of moral qualities in the mind. Our concern, however, just now is with the theory of punishment set forth in the above quotation from his speech. It is not the first time that we have heard these doctrines; but we believe them to be utterly erroneous and untenable, and to arise chiefly in consequence of persons confounding together punishments following infractions of the physical laws of nature with those which follow violations of the laws of society. The two classes of penalties stand upon totally different grounds, although it is not uncommon to hear the remark that crime would be most effectually put down if punishment followed on its commission with as much *certainty* as it does on the breach of physical laws. It is not the mere certainty of a particular punishment following a particular crime that constitutes the efficacy of the penal code; but it is the certainty that a *right measure of punishment, adapted to the peculiarities of each individual case*, will follow upon conviction. Public opinion must go along with and support the administration of justice, or that very element of uncertainty which Baron Bramwell so highly deprecates is at once, and as a direct consequence, introduced into the working of the law. Severe and unjustifiable penalties carry with them the elements of their own failure; they are conceived in ignorance, and cannot stand the light of day. It is for this reason that the numerous executions which formerly disgraced the history of jurisprudence in this country were found wholly inefficacious in diminishing crime. Juries would not convict persons who were proved to have forged or uttered one-pound notes, or stolen to a trifling amount from a dwelling-house; and although the Judges recorded the sentences

of death, and the Government carried them out with unsparing severity whenever they had the opportunity, the very *certainty* with which an unjust penalty would be inflicted on conviction, proved the safeguard to prisoners, and the means of their escaping from any punishment at all. Whence, then, arises a result as uniform in the history of the laws as we must suppose it is surprising to Baron Bramwell? Why, from what else but from that very *moral sense* inherent in all mankind, the existence of which the learned Judge calls in question? It is because society feels and knows that all its punishments are inflicted under direct and fearful responsibility, and must be proportioned to the degree of guilt of each criminal, lest they become, not punishments, but acts of cruelty, and crimes themselves. In this respect they differ altogether from the blind unreasoning penalties that attach to violations of physical laws. If a sane man or an idiot, a reasoning being or a child, wilfully or accidentally jump or fall out of a window, physical injury is the consequence; and in this case, as a general rule, the certainty of the penalty suffices to make men conform to the laws of nature. But the penalties inflicted by society are voluntary on its part, and awarded under a sense of responsibility; for, as Baron Bramwell remarks, pain being in itself an evil, we are only justified in occasioning it to another for some good and substantial reason; in other words, we punish, because the balance of convenience is in favour of punishment for the repression of crime. The law itself fully recognises this principle, in the gradations of punishment which it prescribes for the same offence, and the application of which it leaves to the Judge. There is no mere blind penalty attaching to the infraction of any law; the circumstances of each case are to be taken into account—the amount of temptation, the position and opportunities of the criminal, and the consequences of his crime. To make murder an exception to these principles is impossible, because the punishment of murder is inflicted under just the same kind of responsibility as the most trifling imprisonment. It is not the mere act of depriving another of life that in practice ensures the penalty of death—for even those who consider that the putting of a murderer to death is based upon a direct divine command, would no more execute an idiot than Baron Bramwell himself. You have not, therefore, and cannot have, a *certainty* that even the highest crime known to the law shall, on the conviction of the perpetrator of it, be followed by the exaction of the highest penalty. To hang an acknowledged idiot would, under any circumstances, so shock the public mind, that it would be considered as tantamount to deliberate murder. Here, then, lies the very gist of the subject. It being shown, then, that the penalty

even of murder does not follow on its commission as a matter of logical and inevitable necessity, like the penalties attaching to violations of physical laws, the question arises, Who are idiots? and why are they to form the subjects of this exception?

This is an inquiry more easily made than satisfactorily answered; and yet it must be answered, if jurisprudence is to have the slightest claim to be regarded as a science.

Idiots, as is well known, vary in their salient characteristics. Some of them, besides being destitute of the smallest glimmerings of reason, are also sunk into the lowest depths of physical disability. "Sans teeth, sans eyes, sans taste, sans everything," they are apparently wholly without mind—they could not, therefore, commit murder, from their state of bodily infirmity, even if mentally they could conceive the crime. Other idiots, again, like to the former class as to their mental powers, are yet endowed with great bodily strength, so that they may become exceedingly dangerous to those whom they dislike, and are known not unfrequently to have deliberately murdered them. For what reason, then, are they exempted from execution? Plainly because of the condition of their minds. Where, then, is the line to be drawn which separates the imbecile who forms a fit subject for execution, from the imbecile whose execution would be considered as a murder?

Notwithstanding the dicta of the Judges in the House of Lords, in the case of *MacNaughten*, it will be found that practically there are no general rules on the subject—each case is in reality determined on its real or supposed merits. Juries may be misled into giving a verdict—guided they are not—by what is told to them about a knowledge of right and wrong on the part of the prisoner; but they convict or acquit him just according to their own preconceived notions of insanity. If they believe the accused person to be so mad that he would have formed a fit inmate of a lunatic asylum, they acquit him on the ground of insanity, without ever troubling their heads as to whether he knew the distinction between right and wrong, or was or was not conscious that he was doing a criminal act when he committed the murder. In this they act rightly, and in accordance with the dictates of common sense, guided by their ideas of moral responsibility to the Almighty—for, as every one knows, except perhaps lawyers, the test of a knowledge of right or wrong is utterly fallacious. The maddest lunatic confined in *Bedlam* act from motives, and does wrong knowing that it is wrong, just like any sane and reasoning sinner.

In cases in which the test that juries apply in their own mind has already been brought to a practical issue, and the accused person is confined in an asylum, a conviction for murder is

impossible, no matter how deliberate and cruel the circumstances attending it may have been. Amongst the blackest murders that have ever been committed, are those perpetrated by the inmates of asylums; yet they go unpunished, because the moral sense of mankind revolts against the punishment of a being deprived of the guidance of reason. Who will deny that there are beings going freely about the world who are just as mad as others who are under restraint in asylums? Why, then, is a clumsy test of this kind, which depends upon the local and peculiar circumstances of the lunatic, to form a guide in the case of an issue so awful as that of life and death? Because a poor creature is so unfortunate as to have no friends able or willing to take the somewhat complicated steps necessary for securing him in an asylum, is that any reason why, when he commits a crime, he is to be subjected to penalties which humanity forbids to be applied to his brother lunatics in asylums? We put the question in this way, not because we do educated men the injustice of supposing that they would knowingly sanction any such doctrine as that referred to, but in order to show that there is an inherent necessity that each case, where insanity is pleaded as an excuse, shall be judged and disposed of exclusively upon its own individual merits; and we have the further object of showing that it is because the test supplied by the law—the knowledge of right and wrong—is insufficient, that juries take these matters into their own hands, and often acquit prisoners in the teeth of the directions of the presiding Judge.

Having got thus far, we are now in a position to answer the question as to what should be the course to be practically adopted in these distressing cases; and we have no hesitation in expressing an opinion that the same species of test should be applied here as is by law imperative before any man can be consigned to the custody and refuge of an asylum—viz., an investigation into the mind of the alleged lunatic by scientific examiners. The facts of the case are matters for the jury to determine; the law and the facts are for the Judge; but the question of the infliction of the appropriate penalty should be for the executive, aided by skilled witnesses, or, as they are called on the Continent, "*Peritii*."

A rule of this kind works admirably in the State of Maine. In cases of insanity alleged as an excuse for criminal acts, the person implicated is remanded to safe custody, and carefully watched and examined by eminent medical men, who have made the diseases of the mind subjects of special study, and are appointed to their office by the State. At the expiration of a certain time, having taken into their consideration the facts proved in evidence, and associated them with the results of their own

observations, they make their report, and upon that report the defence of insanity stands or falls. If a similar plan were adopted in this country, there can be little doubt in the minds of those who take an enlarged view of the subject, that the administration of justice would be rendered much more certain than it is at present; defences grounded on presumed insanity would be less frequent, because they could never prevail except upon just and equitable grounds; the penalties of the law would be inflicted upon intelligible data, and, by commanding the assent of the public mind, would act to a far greater extent as preventive spectacles than they do now.

What can be more disgraceful to a civilized community than that the most subtle of all questions, the sanity of a human being, should be left to the decision of a petit jury, composed of men who are often as illiterate as they are prejudiced, and who are guided much more by feeling than by reason? And this leads us to remark, in conclusion, that great injustice is often done to prisoners by the way in which these subjects are argued at the bar. Instead of trusting to the truth, and carefully making themselves masters of the facts of the case, counsel who undertake to prove the insanity of a prisoner are too often in the habit of treating the whole matter as one of sentiment, which it is not at all, and of making compassionate appeals to the feelings of the jury, in the hope of averting the capital sentence. It can hardly be wondered at that, under these circumstances, the feelings of the bench and the public are excited against defences on the ground of insanity, and that they come to regard them merely as tricks of counsel, analogous to the technical pleas of a special pleader. We trust, however, that, through the medium of the Juridical Society, the Judges and the Bar may now be led to regard the question in its philosophical bearings; and we entertain no fears of the result, so soon as they begin to argue it as a logical problem, to be determined by considerations of abstract justice, based upon experience, and guided by a sense of moral responsibility.

THE LATE SAMUEL TUKE, ESQ., OF YORK.

(Extracted from the "York Herald" of October 17, 1857.)

Our obituary of this day will recal a name fraught with no common interest to many of our citizens. Recollections worthy of being retraced will be aroused in some minds—a sympathetic feeling in many—a respectful recognition of departed worth, perhaps we may say, in all.

It is one of the most interesting features of the social framework of Britain, that while it recognises the distinctions of feudal rank, and records the exit of each worthy head of a time-honoured house, as in some sort the property of the nation, not the less through the various gradations of the scale does it appreciate the successful citizen, the independent yeoman, or even the lowly mechanic, if such an one, filling worthily his station, or rising to a higher sphere, has left to his successors incentives to the like honourable course—"footprints on the sands of time."

Of the burgher or citizen class, was the immediate family of Samuel Tuke. The name of Tuke, early scattered in Nottinghamshire and South Yorkshire, appears in the seventeenth century in the city of York, where the ancestor of the subject of this sketch, having embraced the principles of the Quakers, suffered imprisonment in consequence, in "Ouse Bridge Prison," in the year 1660.

Samuel Tuke was the eldest grandson of William Tuke, who died in 1822, at the patriarchal age of 90, and whose name is so well known as the founder of the Friends' Retreat, near York, in 1792, and as the originator in this country of those principles in the treatment of insanity, which, in their progress, have so much contributed to the alleviation of human suffering.

William Tuke's eldest son, Henry Tuke, died at the comparatively early age of 58, not less honoured and beloved than his father.

Samuel Tuke, the only son of Henry who lived to maturity, was born 31st July, 1784. He early co-operated with his grandfather and father in their philanthropic labours. To the subject of insanity especially, as is well known, he devoted a large portion of his time, and in the course of his life was the author of several works which are well known on the Continent and in America, as well as in this country. His "Description of the Retreat" was published in 1813, and led to very remarkable consequences—consequences which the author himself had never ventured to anticipate. Steadily did he pursue his labours in the great work of bettering the condition of the insane, not only by his writings, but by the unremitting attention which he paid to the welfare of the Retreat, of which he was the treasurer for thirty years. Not inaptly has he been called "the Friend of the Insane."

In 1840, he edited the work of a German physician, Dr. Jacobi; in the introduction to which he fully expresses his views in regard to the provision for the insane, and their moral management, with many practical directions regarding the construction of asylums.

But to many of the readers of this memoir it is as the public man and the active citizen that Samuel Tuke will be chiefly remembered. To some, as the man of warm, deep, and abiding sympathies, in private life; to not a few by the earnestness, the deeply devotional spirit, the catholicity of feeling, yet lofty standard of Christian obligation, which marked his religious character.

He was never a party man. His mind was simply incapable of being so moulded. Every line of action which he adopted, however much it might provoke hostility in those who honestly took a different view, was simply the result of some great principle, firmly grasped and rigidly carried out. Thus, he early supported the concession of political privileges to the Roman Catholics, when a very different view might have been expected from association and training. Yet his mind was essentially conservative, in the sense of a deep feeling of the *venerable*—intense in proportion to the moral worth associated with it. Equally strong was his love of social order—his idea of government as the embodiment of a governing moral force.

The period of his life comprised events of no ordinary political interest and importance. The contested election for the county of York in 1807; the abolition of the Slave Trade, and the struggle for the extinction of the system of Slavery; the Reform Bill of 1832, and the carrying out of its spirit and principles, may be mentioned as subjects in which he felt and manifested a warm interest.

There was, we believe, only one occasion on which he appeared before the public in any sense as a political partisan. In the year 1833, on the election of the Hon. Thomas Dundas to fill a vacancy in the representation of the city of York, having been himself solicited to stand, he gave the full weight of his eloquence in support of that gentleman. This was very much prompted by an ardent wish to carry out those principles to which we have already alluded, and which, in his mind, were inseparably connected with the idea of a true Reform in the Representation.

It was, however, in support of the claims of the British and Foreign Bible Society—in Anti-slavery efforts—the cause of Scriptural education of the poor—and various movements of a philanthropic or religious character, that his influence and his voice were most frequently exerted.

We might, were it needful, enumerate the various charitable institutions of the city as partakers of his pecuniary or active personal assistance. Judicious Benefit Societies for the Working Classes—Sanitary Reform—his active and unremitting exertions when guardian of the poor—will naturally be suggested to the minds of those who may have watched his public life, or shared his labours. In this last-named capacity, his sympathy with suffering and intense aversion to anything bordering upon oppression, were obvious features of his character.

Samuel Tuke's mind was a rare combination, comprising a sound judgment with no small measure of more shining qualities. To a vigorous and perceptive intellect, he united a vivid imagination, and a strong sense of the beautiful. He was therefore a man of taste—rigidly correct taste. His eloquence, though somewhat unequal, was of a striking and often lofty character. There was a masterly comprehension of an idea—forcible, clear, and well-enunciated expression. On certain occasions the clear summing-up of conflicting arguments, and the delivery of a lucid judgment with calm precision, yet always with a certain warmth of feeling, elicited a display of mental power not easily forgotten.

The preceding slight outlines will be readily filled up by those who knew the man,—not less readily when we allude to him as the kind neighbour, the unwearied benefactor to the poor, or the fellow-citizen, sharing in

“————— the talk
Man holds with week-day man in the hourly walk
Of the mind's business.”

We must not omit to say that Samuel Tuke was a *man of business*. He was long the head of a prosperous firm, succeeding to the concern founded by his grandfather now about a century ago. The unflinching energy and varied talents of a mind whose home was in far higher pursuits, precluding him from being less than the presiding mind of the whole,—these were best understood by persons brought into intimate association with him in this character.

The sanctuary of the domestic hearth with such a mind was indeed a sanctuary; and only the large and happy family who revered him as a parent can fully understand the associations which this allusion may call forth. After eighteen years of married life, he was called upon to endure the severest trial which human affection can undergo. But the man, or rather the Christian, though “cast down was not destroyed;” and soon was he again active in the field of duty, with energies only deepened by the shade of sorrow. His active intellect hardly seemed to admit of repose. It had been well, indeed, if such a mind had more of the disposition to relax. Playfulness was not an element in his character, which was naturally stern, but not the less was there the flow of natural wit, and at times a chastened humour more delightful still. His religious character may be touched upon—briefly, because of the sacredness of the subject; confidently, because it was the substratum of his moral being—at once the spring and the regulator of his energies. We would fain appeal to those who, alas! are no more household names in our city—the names, well recognised in their day, of William Gray, John Graham, Anthony Thorp, Thomas Wemyss—as members of a vanished circle (as we can confidently to not a few still living), who would instantly appreciate the soundness and stability of his Christian character.

As a member of the religious Society of Friends, by conviction as well as by birth, he was, as in everything else, the active exemplar of the principles he adopted. He carried them out for himself, even in their remoter bearings; but surely we need not again say that Samuel Tuke belonged less to a sect than to the universal Christian Church.

THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

APRIL 1, 1858.

ART. I.—ON CIVILIZATION.*

WHETHER the human race be one or many as regards its origin, will probably remain for ever a contested point amongst those who depend entirely upon secular history and science for the solution of the question ; and although we hold that the unity of race is the theory in every aspect most accordant with true philosophy, yet it must be confessed that the diversity of condition and development, both physically and intellectually, which is exposed to the investigator at almost every step, would appear almost sufficient to warrant the opinion, that such various habits, manners, customs, and modes of life and thought, could not be the normal characteristics of one species. The Esquimaux, muffled up to the eyes, gorged with many pounds of blubber—the naked inhabitant of Van Diemen's Land, starving on a few oysters or a precarious fish—the New Hollander, rejoicing over his worm which he has just extracted from a piece of rotten wood, or luxuriating over his savoury mess of fern-leaves and pounded ants—the African, broiling his ebony limbs in the burning sun—the Troglodyte, skulking his life away like any other wild beast in his cave ;—these, the extremes of humanity, present almost as strong contrasts amongst themselves as each does to the polished European. This latter, wanting any of the necessities or luxuries of life, orders it to be “sent in”—the poor Australian “goes out” for it. Let us follow him, fortunate man that he is if he has no friend who has “gone out” before him, in the intention of making his dinner of him. We shall most probably have a weary walk : mile after mile is passed, and no sign of animal life—such, at least, as might be accessible or available for food. His native

* “History of Civilization in England.” By Henry Thomas Buckle. Vol. I. London. 1857.

land affords no eatable fruits. He gains the sea-shore, but the sea is now tempestuous, and his expected fish-meal is not to be had; and he probably relieves his gnawing hunger by eating some grubs found in a species of dwarf gum-tree. He may have tracked some bee to its nest, but that is fifty, sixty, or eighty feet up a smooth, branchless tree: hunger is a strong stimulus, and with his rude hatchet he notches the tree with steps, grasping the trunk with his left arm, and so painfully and slowly attains his object. And so his day passes in the search (often fruitless) for food. When night comes, he does not go home, he has no home to go to; but he puts up a piece of bark or some branches of a tree, to shelter him from the wind; sometimes he kindles a fire; and falls asleep, to awake again and resume his weary quest for food. He has no trouble with dress, so that there is nothing to delay his march in search of breakfast. So day after day he will be found starved to death on the coast, after an unusually scarce season. He believed in a Koyan and a Potoy—a good and an evil spirit; but he had but few hopes or fears connected with either.

This is a sad spectacle of degraded humanity, but there are depths still lower, or at least more revolting, than this. I. Pickering, speaking of passing through one of the villages in his visit to the Feejee Islands, says—"The male inhabitants were absent at the time, engaged, it was said, in *cooking a man*—a statement which, although it was not doubted, we did not feel particularly desirous of verifying." The same learned writer adds:—"In other parts of the globe, instances of cannibalism have occurred, sometimes from extreme necessity, or as a deed of savage ferocity; and we read of tribes who practise it as a ceremony, religious rite, or even as a *manifestation of affection*. At the Feejee Islands the custom rests on different grounds. It is here interwoven in the elements of society; it forms in a slight degree a pursuit; and it is even regarded in the light of refinement. Instances are of daily occurrence; and the preparation of human flesh calls into requisition a variety of culinary processes, and is almost a distinct art."

* The Battas of Sumatra are, in comparison with some tribes, a polished people; they have a currency, a regular system of laws and government, and a literature; yet they eat their parents, "and that not so much to gratify their appetite as to perform a pious ceremony. Thus, when a man becomes infirm and weary of the world, he is said to invite his own children to eat him, in a season when salted limes are cheapest. He then ascends a tree, round which his friends and offspring assemble, and, as they shake the tree, join in a funeral dirge, the import of which is, 'The season is come, the fruit is ripe, and it must descend.' The victim ascends, and those who are nearest and dearest to him deprive him of life, and devour his remains in a solemn banquet."—*Moore's Papers on the Indian Archipelago*.

In order fully to appreciate the conditions under which uncivilized humanity is found to exist, we must glance at one or two other tribes, wherein we shall see depicted what some philosophers have considered as "original man." Amongst the "WILD PEOPLE" of Ceram, society can scarcely be said to exist: each family is at perpetual war with all around. They have no houses nor huts, but live and sleep in trees, the branches of which they twine so as to form some defence from their fellows. In the Malay Peninsula there is a forest tribe, called by writers the "ORIGINAL PEOPLE." They live in the deepest recesses of the forest; they never come to the villages, for fear of meeting some one. They neither sow nor plant, but live on fruits and what animals they can take. Their language is understood by no one. They have no king nor chief, but a Puyung, to whom they appeal in disputes. They have no religion whatever, nor any idea of a Supreme Being. When one dies, they bury the head and eat the body.

Dalton thus describes the "WILD PEOPLE OF BORNEO:"—

"Further towards the north are to be found men living absolutely in a state of nature, who neither cultivate the ground nor live in huts; who neither eat rice nor salt; and who do not associate with each other, but rove about the woods like wild beasts. The sexes meet in the jungle, or the man carries away a woman from some campong. When the children are old enough to shift for themselves, they usually separate, neither one afterwards thinking of the other. At night they sleep under some large tree, the branches of which hang low. On these they fasten the children in a kind of swing. Around the tree they make a fire, to keep off the wild beasts and snakes. . . . These poor creatures are looked on and treated by the Dayaks as wild beasts. Hunting parties go out, and amuse themselves by shooting at the children in the trees, the same as monkeys, from which they are not easily distinguished."

The men are all killed, some of the women kept alive, and the children are kept to paddle the canoes, having one foot cut off to prevent escape. It appears that the children cannot be tamed sufficiently to be entrusted with their liberty. "Selgie told me," continues the same narrator, "he never recollected an instance where they did not escape to the jungle the first opportunity, notwithstanding many of them had been kindly treated for years." Such is humanity in one of its aspects.

But it is not alone geographically and ethnically that men widely differ from each other. Marked as are the differences between our populations of Western Europe and the people just described, they are perhaps not more so than are the differences between our present condition and that of our earliest times. It

is probable that the early history of some of our most refined European States would, if it could be traced, afford scenes as degraded and revolting as those above noticed. To go no further than our own country: if contemporary annals may be trusted, our condition was not very refined. It seems that our ancestors, even at all events, the inhabitants of our country about 1900 years ago, were but half-naked savages, painted or stained so as to give them a terrible appearance in war, living chiefly on milk and flesh, scarcely acquainted with agriculture, and their only clothing made of skins. That their manners and customs were of the most barbarous nature, may be inferred from the following passage from "Cæsar's Commentaries:"—"Uxores habent denique denique inter se communes, et maximè fratres cum fratribus, et parentes cum liberis. Sed si qui sunt ex his nati, eorum habentur liberi, à quibus primum virgines quæquæ ductæ sunt. The religion of the Island was a superstition of the most frightful character—a Polytheism, each divinity of which was most appropriately propitiated by human sacrifice. In short, we have but to look at the barbarous nations of distant lands in the present times, to find a tolerably accurate rescript of what we were before the Roman invasion.*

This is a consideration full of hope and promise, and one which leads all those who have faith in the high destinies of the human race to inquire earnestly what is the change which has come over our land during these two thousand years? what is the essential difference between us and those who *are* so like what we *were* and what is lacking to these?

The answer to these questions is ready on every tongue, and comprised in one word,—CIVILIZATION; and very few, having given that answer, will have any doubts as to the completeness with which the problem has been solved. Yet until the meaning of the word has been defined, and its full comprehensiveness indicated, we shall be very far from having arrived at any practical understanding of the subject.

Before entering upon this investigation, some preliminary inquiry is requisite. We have just seen what man is in his lowest state of development, and the question naturally arises, "Is this state an original one, or is it a fall from some higher condition? To exhaust the question completely, we should add the third

* There is still a third aspect in which the relations of refined and barbarous life might be viewed—viz., in respect of the fact of the existence, even in the most civilized societies, of large masses of men in an utterly uncivilized condition—degenerate, demoralized beings, of intellects as undeveloped, of morals as low, of passions, vices, and crimes as violent and degrading as any to be found in heathen lands. These constitute the DANGEROUS CLASSES, the rock-ahead of all legislation, the insoluble problem of all society. The subject has been partly discussed in our pages before, and will receive further attention, and, we hope, elucidation, hereafter. We therefore omit all but the most passing consideration of it here.

possibility, as to its being an *advance* from some still lower phase. But inasmuch as some of the races to whom we have alluded seem to differ from the monkeys in little else save in some unintelligible rudiments of articulate speech, and the casual accomplishment of kindling a fire, we may leave this view out of the calculation. The subject, from its nature, admits of no demonstration philosophically; yet the spectacle consequent upon such a hypothesis is too grotesque to be accepted as a probability.

"We must fancy man feeling his way at once to the lowest elements of civilization, and the most elementary conceptions of religion. And as savages make no rapid progress (*some* philosophers say they cannot, and all history shows they do not,) without instruction from *without*, and as by the supposition* primeval man could not have any, it is hard to say how many ages he crawled before he walked, lived on berries and acorns before his first incipient attempts at cookery, yelled his uncouth gibberish before he made (if he could ever make) the refined discovery of an articulate language, and lighted on his first deity in the shape of a bright pebble or an old fish-bone, and was in raptures at the discovery! Or, rather, it is hard to say how the poor wretch ever survived the experiment of any such introduction to the world at all. Some philosophers have defined man as a laughing animal. I am afraid that, on this theory, it was some ages before he found anything to laugh at. It must have been very long before his 'differentia' appeared."

Rejecting, then, the consideration of any possible lower grade of humanity than those described, two theories present themselves, one or other of which must necessarily account for barbarous man. The first is, that he is the unmodified type of man as originally created; "natural progress" not yet having accomplished any part of its mission. The second involves the view that he is fallen from a higher original condition, through the agency of some means internal or external to himself. Even on the supposition of the diversity of man's origin, this must still be an exhaustive division, inasmuch as within historic times nations have progressed from a condition of barbarism like that described, to one of very high civilization; and therefore the developmental condition of these in their earliest times is as much the subject of inquiry, as that of those who still remain in barbarity. Direct evidence of the earliest condition of the human race must, from the nature of the case, either be wanting, or be obtained from a revealed source—that is, from an external revelation. The legends which each nation possesses as to its origin are invariably simply fabulous. Therefore to determine man's

* Viz., that of "*natural progress*," which is one of the dogmas of Mr. Buckle's book. The reason for the quotation, which is from the "*Defence of the Eclipse of Faith*," p. 57, will be apparent in the course of the essay.

primitive state, we have but two methods—reason and analogy on the one hand; and a reference to those documents which can be historical, contained in the earlier chapters of the book of Genesis, on the other. These, rejected by some, and considered by others to be of limited application, are clearly all the direct evidence accessible to us.

What, then, does analogy teach us? Reasoning backwards from the present condition of all civilized countries, we find each step a slight, though definite, advance towards the condition of savage life, until we arrive at some such condition that of our own country two thousand years ago. At such a point, authentic records are in general wanting, and our knowledge of arriving at a knowledge of the previous state, is by a retrospectively continuing the retrogression from all the art of civilized life,—a process which will undoubtedly sooner or later bring us to a perfectly wild state. Were this legitimate method could have no doubt whatever as to man's primeval condition but besides appearing almost like an assumption of the question at issue, we are met by two important considerations which seem to cast some discredit on the results, and then upon the method.

The first is, that however far we pursue our researches backwards, so long as authentic history is our guide, we find evidence of civilization somewhere—in some nation or people. This itself would, of course, prove nothing more than that this nation had worked out its own progress earlier than its neighbours; the second is of more importance. We may safely assert that the history of every civilization of which the history can be traced, is connected with that of its intimate communion with some other more highly civilized people, either in trade, commerce, or war; and that we have no authentic records of a civilization originating amongst and being completed by some other people, unassisted by any other. If analogy, then, be good for anything in such an investigation as the present, it would lead us to infer that the first forms of civilization were not spontaneously originated amongst a people as barbarous as the "original people" of Borneo. We should, then, naturally conclude that somewhere or other a higher type of humanity had already existed; and, as a logical consequence, that the *earliest* type of civilization higher, and that these men, supposed to be "in a state of nature" were really fallen from a state of nature through some moral or physical agency, or both combined. Let us hypothetically attach even no more weight to the documents alluded to than to a theory to account for the present condition of the human race; even then we shall find it much more universally applicable

any other yet propounded. Let us suppose that there is one family, consisting of several members, possessing some knowledge of useful arts, skilled to some extent in agriculture, and habituated to a pastoral life. Their descendants multiply, and become too numerous for the land in which they dwell; portions of them migrate in different directions, and become modified as to the constitution of their society in accordance with the climate, soil, and natural products of the place where they finally fix themselves. Some establish themselves upon fertile localities, which repay cultivation, and found permanent colonies where their former civilization will to some extent flourish; some adopt a nomadic pastoral life, in which the arts to which they were formerly addicted will become useless, and the remembrance of them gradually disappear. Others, again, will be thrown where the products of the earth are insufficient for their support, and will become hunters; and, in the constant arduous struggle for existence, will still more rapidly lose sight of the laws of civilized life. Lastly, some will be thrown, not from choice, but by accident, where the energies of the whole man will be required to eke out even the most precarious existence from the scanty supply both of vegetable and animal productions; and it is easy to see how the downward course of these will soon bring them almost to a level with the brutes. Add to these natural causes the influence of the excesses, the vices, the passions, the general evil tendencies inherent to a warped moral nature, and we need be at no loss to understand the present degraded phases which humanity so frequently assumes. Such is the theory which we should adopt to account for the varieties of barbarism and civilization.

Nor is this merely a speculative and unimportant question. If the original condition of man be that of utter barbarism and degradation, then the methods by which his elevation from that condition is to be expected must remain merely empirical; nay, even the very possibility of such elevation must remain in each case a matter of doubt until success be achieved. Not so if it be clearly established that such conditions are only the natural results of the operation of degrading moral and physical agencies upon a subject originally capable of higher things. Then, and only then, can we hope that a correct system of moral and physical hygiene will be efficacious in restoring him to his former condition, and capacitating him for further progress. Then, also, should we see a clear indication of the true method of reorganizing and regenerating the barbarous and demoralized tribes or masses which mingle with and corrupt our most civilized communities, and which laugh our present methods to scorn.

As we have seen, the lowest forms of humanity are those

where, for his subsistence, man is dependent upon the produce of the chase, fishing, or the natural uncultivated duce of the earth. The first step in his upward course toward civilization is taken when he takes to a pastoral life. Still, without settled habitation, migrating frequently in search of pastures, he endures much privation, and in his life there are few elements of progress; yet it is one step in advance. Next is a more important one—that of adopting a fixed home, agricultural pursuits. Hence arise the elements of a social system for here must flourish to some degree a practice of the arts; there must be a variety of interests, sometimes clashing; a liability of invasion from the nomadic tribes of the surrounding districts; and, in consequence of this, the necessity will be felt for some sort of social combination, marked by more or less law and order; likewise, the society will inevitably divide itself into the governors and the governed. The transition from this to the feudal system is speedy and natural; thence to absolute monarchy and after that to the highest state of civilization, that “in which security of person and property is firmly established by a complete and complete administration of good laws, where public opinion has the greatest influence, and where more happiness is found in the community.”*

Such are the external phenomena or the landmarks of advancing CIVILIZATION; but we are yet as far as ever from having attained the essential nature of the change, and the agencies which are in operation in its production. The difficulty of giving a scientific and comprehensive definition of the term is acknowledged to be great; perhaps for this reason the writer of the learned work placed at the head of this essay avoids the attempt and contents himself with reasoning upon some understood common acceptation of its meaning. This is to some extent convenient, as it permits the actual fact to be viewed in a vague or arbitrary sense, so as to accommodate it to the theory brought forward to account for it, rather than to mould the fact strictly in accordance with some accurate formula of the fact.

Let us grant, for convenience, that a strictly accurate scientific definition of Civilization is impracticable, and attempt to analyze the meaning of the term in its general and ordinary acceptation.

The etymology of the word will help us but in a very small degree. It gives us the idea of the perfecting of civil and social life, the life of society, the relations of men to each other. Evidently this does not exhaust the question. We will follow M. Guizot in his analysis of what Civilization is *not*.

* Mackinnon's "Hist. of Civilization," vol. i. p. 22.

1. A people whose external life is happy, with well-administered forms of justice, may fulfil the above conditions; but their intellectual and moral existence is in a state of torpor. This is *not* civilization. "We are not without instances of this state of things. There has been a great number of small aristocratic republics, in which the people have been thus treated like flocks of sheep, well kept and *materially* happy, but without moral and intellectual activity. Is this civilization? Is this a people civilizing itself?"—*Guizot*.

2. The material existence may be lower than in the last case, but still tolerable; the intellectual and moral wants are to some extent supplied; they are *meted out* to each individual—no one is permitted to seek for himself. "Immobility is the characteristic of their moral life." The instances of this condition are found amongst the populations of Asia, the Hindoos especially. *This* is not civilization.

3. "I change" (says M. Guizot) "altogether the nature of the hypothesis: here is a people among whom is a great display of individual liberties, but where disorder and inequalities are excessive; it is the empire of force and of chance; every man, if he is not strong, is oppressed, suffers, and perishes; violence is the predominant feature of the social state." Europe has passed through this condition, but it is not civilization.

4. Liberty and equality do not constitute civilization, for such are the elements of savage life.

From these illustrations of what civilization is *not*, we may arrive at some idea of what it *is*. The essential idea seems to be progress and development, moral and intellectual culture, extending and perfecting the social relations: "on the one hand, an increasing production of strength and happiness to society; on the other, a more equable distribution, amongst individuals, of the strength and happiness produced."

But this is not all that is comprised in this word Civilization. In this view, man is considered but as an element of a social community; but he is something more than that; he has his inner life, his faculties, his sentiments, his ideas; these assert their claim to development; and side by side with the perfecting of society, this, the perfecting of humanity, proceeds to complete our conception of a durable civilization. Which of these two must be accepted in the light of *final cause*—whether man perfects his faculties in order to improve his social relations, or whether the improvement in social relation is but the groundwork for the development of the individual: in short, whether man is made to serve society, or society to serve man? These are questions upon which we must not enter. We will conclude this part

of our subject with a noble sentiment uttered by M. Royer Collard :—

“Human societies are born, live, and die on the earth ; it is there their destinies are accomplished. BUT THEY CONTAIN NOT THE WHOLE MAN. After he has engaged himself to society, there remains to him the noblest part of himself, those high faculties by which he elevates himself to God, to a future life, to unknown felicity in an invisible world. We, persons individual and identical, veritable beings endowed with immortality,—we have a different destiny from that of states.”

But leaving these introductory questions as to the phenomena and essential nature of Civilization, it is time that we inquire into the agencies internal and external to man, which are engaged in its development. As these agencies are treated of most elaborately in the work, the title of which is prefixed to this essay, we propose to give an abstract of the author's views, with such comments as may seem needful, either for purposes of illustration or refutation.

Mr. Buckle has produced the first volume of a work of most extensive and profound research and learning ; his theories, however, are startling and extravagant in no ordinary degree. OF those circumstances and institutions which are commonly supposed to influence mightily for good or for evil the fate of nations, he believes in very few. In man's “natural progress” he believes much—in an overruling Providence, not at all ; in the power of a people to work out its own beliefs and civilization, he has much faith ; but any assistance from without is “a tampering” with this natural progress. In climate, soil, and aspects of nature, there is great virtue and power as to the production of civilization ; but *none whatever* in religion, morals, literature, and government.* These, and other propositions of similar import, will receive ample illustration as we proceed in our analysis.

The first chapter is devoted to an exposition of the probability that history is governed by laws as definite as those of physical science ; that the elements are more numerous, and, from our imperfect knowledge of them, the results are less easy to predict, and more complex ; that the laws of human action are so definite, that if we were fully acquainted with all the elements of character and motive in individuals or communities, we should be able to predict their history with the same certainty that we can predict eclipses of the sun or moon. The doctrines of chance and necessary connexion, of free-will and predestination, are also discussed, and all set aside ; Mr. Buckle, so far as we can gather

* Vide p. 232.

from his words, believing in nothing but an enchainment of events. Johnson said to Boswell, "Sir, we *know* our will is free, and there's an end on't." This conclusion is opposed on two considerations—first, that perhaps consciousness does not exist as a separate faculty; second, that even granting it to do so, its evidences are not to be trusted! A strange, unpractical way of discussing an important subject. No one doubts the consciousness of the man who, for an infraction of the laws of his country, is condemned to five years' penal servitude; but those who attempt to convince man of his responsibility, and so induce him to avoid such infractions, are met by an incomprehensible metaphysical subtlety. As a specimen of the conclusions to which these arguments tend, we will give one or two quotations:—

"Rejecting, then, the metaphysical dogma of free-will and the theological dogma of predestined events, we are driven to the conclusion that the actions of men, being determined solely by their antecedents, must have a character of uniformity; that is to say, must, under precisely the same circumstances, always issue in precisely the same results. And as all antecedents are either in the mind or out of it, we clearly see that all the variations in the results—in other words, all the changes of which history is full, all the vicissitudes of the human race, their progress or their decay, their happiness or their misery—must be the fruit of a double action; an action of external phenomena upon the mind, and another action of the mind upon the phenomena."—(p. 18.)

"The offences of men are the result not so much of the vices of the individual offender,* as of the state of society into which that individual is thrown. This is an inference resting on broad and tangible proofs, accessible to all the world; and, as such, cannot be overturned or even impeached by any of those hypotheses with which metaphysicians and theologians have hitherto perplexed the study of past events."—(p. 27.)

Such being Mr. Buckle's view of the nature of human responsibility, we feel curious to know how, in proper course, he will justify the formation of a criminal code. Certainly, rewards of virtue and punishments of vice should equally be dead letters, if such be the sole source of action.

The irrefragable proofs above referred to are those derived from statistical tables. It is shown that about the same number of murders, suicides, and other crimes occur annually; and from this it is most strangely assumed as proved, that these crimes are but "the product of the general condition of society, and that the individual felon only carries into effect what is a necessary

* "The moral actions of men are the product *not* of their *volition*, but of their antecedents."—(p. 29.)

consequence of preceding circumstances. (!) In a given state of society, a certain number of persons must put an end to their own lives. This is the general law; and the special question as to who shall commit the crime depends of course upon special laws, which, however, in their total action, must obey the large social law to which they are all subordinate. And the power of the larger law is so irresistible, that neither the love of life nor the fear of another world can avail anything towards checking its operation!!"

Is it indeed so? Is human nature a thing only to be summed up by tens, and hundreds, and thousands, in order to investigate and exhaust its conditions? Mr. Buckle speaks of statistics as "a branch of knowledge which, though still in its infancy, has already thrown more light upon the study of human nature than all the sciences put together." Far be it from us to undervalue so important a science; but that it reveals anything whatever of human nature, we dispute entirely. What can the science of statistics know or tell us of the hopes and fears, the cares and compensations, the joys and sorrows, the aspirations and despair, the yieldings and resistances, the passions, desires, and emotions, the motives and hindrances, which in their aggregate influence human action, and *constitute*, so to speak, human nature? Nothing. But after all these have wrought their effect—when the strife is over and the work is done—statistics can step in, and number the slain and the survivors. As well might we try to arrive at the true theory of a military government by counting the slain in its wars; as well calculate the orbit of a planet by counting the *number*, instead of investigating the *nature*, of its aberrations; as well count the acts of parliament by way of ascertaining the principles of legislation, as attempt, by numbering the residuum of conflicting forces, to define the source and principles of human action. The dial of a chronometer tells nothing of the motor force—the balance, the compensation within; it only indicates the general result; and he who would ascertain the laws of humanity from statistics, might also hope to construct a chronometer from the mere contemplation of the dial-plate.

We have dwelt at some length upon this introductory chapter because in it seems to be contained the key to the whole of Mr. Buckle's strange philosophy, which, if it be intended to mean anything, reduces man to a mere machine, an integral part of society, having neither individuality, free-will, nor responsibility; a view so utterly subversive of all practical legislation, so repugnant to the common sense of mankind, that we cannot too strongly protest against it.

We pass on to notice the effects of climate, soil, and the aspects of nature, upon civilization—a part of the subject in reference to which we find much valuable matter in the work before us, interspersed still with much that is objectionable.

Mr. Buckle does not speculate upon the original state of man, nor his passage through the earliest stages of progress; he takes him up when he has got a fixed home, and argues that the first subsequent step towards civilization must be the accumulation of wealth in the community, so as to leave an overplus after the wants of the people are supplied. For so long as every man is fully occupied in gaining his bread, there can be no leisure for the cultivation of intellectual pursuits, which are (*auct. loquent.*) the sole agents in civilization. But an accumulation of wealth occurring, “now it is that the existence of an intellectual class first becomes possible, because for the first time there exists a previous accumulation, by means of which men can use what they did not produce, and are thus enabled to devote themselves to subjects for which, at an earlier period, the pressure of their daily wants have left them no time.”

The first sources of wealth are climate and soil, or, in general terms, the physical peculiarities of the country; and the amount will be determined (1) by the energy and regularity of the labour, and (2) by the returns made by the soil to such labour. The former will be the result of climate, influencing man's power and disposition to work; the latter is dependent on the soil alone. The *extremes* of climate are unfavourable to the regularity and energy of man's work; thus, in Norway and Sweden, from the severity of the winter and the shortness of the days—in Spain and Portugal, from the heat and dryness of the weather—continued agriculture becomes impossible. “The consequence is, that these four nations, though so different in other respects, are all remarkable for a certain instability and fickleness of character; presenting a striking contrast to the more regular and settled habits which are established in countries whose climate subjects the working classes to fewer interruptions, and imposes on them the necessity of a more constant and unremitting employment.”—(p. 40.) Mr. Buckle takes an interesting review of the influence thus exerted upon various nations and districts. Civilization in Asia has always been confined to “that vast tract where a rich and alluvial soil has secured to man that wealth without which no intellectual progress can begin.” To the north of this district there is a long line of barren country, inhabited by Mongolian and Tartar hordes, who, so long as they remained in this place, never emerged from an uncivilized condition; yet in their migrations arriving at more fertile soils, founded great

monarchies in China, India, and Persia, with a civilization equal to that of any ancient people. The Arabs, also, in their own country, were always a rude, uncultivated people; but, conquering Persia in the seventh century, Spain in the eighth, and the Punjaub in the ninth, they founded mighty empires, "built cities, endowed schools, collected libraries; and the traces of their power are still to be seen at Cordova, at Bagdad, and Delhi." The only civilized part of Africa—i.e., Egypt—is indebted likewise to its soil for its power of elevating itself. Thus, in Asia and Africa, the condition of civilization was a fertile soil. Europe, however, the case is different: here the climate has more influence than the soil as affecting the energy of man. And hence the primary difference in character between the European and other civilizations; for whereas the influence of soil is limited and stationary, the development of man's resources, as favoured by a mild and temperate climate, is probably unlimited and ever increasing. Hence the stationary character of Asiatic civilization and hence the constantly progressive character of those of Europe.

Besides the accumulation of wealth, a most important question arises as to its distribution, which in advanced societies depends upon very complex laws, but at an early stage seems to be governed in great part, if not entirely, by "physical laws; these laws are, moreover, so active as to have invariably kept a vast majority of the inhabitants of the fairest portion of the globe in a condition of constant and inextricable poverty." We must pass over this part of the subject very briefly, omitting all arguments connected with interest, profit, wages, and rent. After the first tendency towards a division of society into the two classes of workers and non-workers, the increase of the latter will be determined in great part by the presence of a cheap and plentiful national food. In consequence of this increase, the labour market will be overstocked, wages will be low, and a great amount of poverty will be the result. Such is Mr. Buckle's theory; to discuss it would lead us too far from our special points of interest and plunge us into the inextricable mazes of political economy.

The fact of the inhabitants of cold climates requiring a very carbonized form of food, whilst those of warm latitudes require one more oxydized, has a powerful influence upon civilization; for whereas the latter kind of food is produced by the earth abundantly and almost without labour, the former, being chiefly of animal origin, is more difficult to obtain. The result is, that in these colder climates a more adventurous and bolder spirit has generally been observed, even in the infancy of societies than in the inhabitants of warmer countries. Tropical populations, as a rule, increase rapidly; therefore wages &

low, and poverty prevalent; whilst in cold climates the increase is less rapid, the labour-market is not overstocked, and wages are higher. Hence it arises that in temperate climates there is a very much more equable distribution of wealth, a consequent development of a middle class and of public opinion, and as the natural result, a greater capability of permanent and progressive civilization. One exception to this distinction between European and Asiatic populations is found in Ireland,—the only country in Europe, according to Mr. Buckle, which possesses a very cheap national food, the potato. The population of Ireland, before the aspect of the country was changed by pestilence and emigration, was increasing at the rate of 3 per cent., whilst that of England was only increasing $1\frac{1}{2}$ per cent. Mr. Inglis calculates the average rate of Irish wage at fourpence per day.

To the extremely unequal diffusion of wealth, its concentration amongst the higher classes, and the abject poverty of the lower, is ascribable the transitory and imperfect nature of the Asiatic civilizations. In India, for instance, where on this view the abundance and cheapness of the national food—rice—is the source of the evil, the upper classes are enormously rich, the lower miserably poor. The difference in wealth is attended by a corresponding inequality in social and political power.

"It is not therefore surprising, that from the earliest period to which our knowledge of India extends, an immense majority of the people, pinched by the most galling poverty, and just living from hand to mouth, should always have remained in a state of stupid debasement, broken by incessant misfortune, crouching before their superiors in abject submission, and only fit either to be slaves themselves, or to be led to battle to make slaves of others."—(p. 66.)

The miserable condition of the lowest Hindus or Sudras is something almost inconceivable to us. If one of them speaks of a Brahmin contemptuously, his mouth is burned; if he insult him, his tongue is slit; if he injures him, he is put to death. If he listen to the reading of the sacred books, boiling oil is poured into his ears; if he commit them to memory, he is killed. He is forbidden by law to accumulate wealth, and continues a slave in estimation although freedom be given him; "*for (says the lawgiver), of a state which is natural to him, by whom can he be divested?*"

"In India, slavery—abject, eternal slavery—was the natural state of the great body of the people; it was the state to which they were doomed by physical laws impossible to resist. The energy of those laws is, in truth, so invincible, that wherever they have come into play they have kept the productive classes in perpetual subjection. There

is no instance on record of any tropical country, in which wealth having been extensively accumulated, the people have escaped the fate; no instance in which the heat of the climate has not caused an abundance of food, and the abundance of food caused an unequal distribution, first of wealth, and then of political and social power. Among nations subjected to these conditions, the people have counted for nothing;—thus have been generated habits of tame and servile submission, by which they have always been characterized. For it is an undoubted fact that their annals furnish no instance of their having turned upon their rulers, no war of classes, no popular insurrections, not even one great popular conspiracy.”—(p. 73.)

It would appear as though this passage must have been written before the recent events in India. We give it, however, as an illustration of the general views of our author.

What rice was to India, that was the date to Africa, and particularly Egypt. The palm-tree supplies millions with their daily food in Arabia, and almost the whole of Africa north of the Equator. In one part of Upper Egypt, the Said or Thebaid there is a food even more liberal in its returns to cultivation than the date—i.e., the dhourra, which yields 240 to 1 in produce. The lotus, also, and a profusion of plants and herbs growing spontaneously, afforded food to the Egyptians. Thus, in Egypt the people multiplied very rapidly, because at the same time that the earth was so prolific, the nature of the climate was such that the inhabitants only required small quantities of food; and as the result, Egypt was probably more thickly populated than any country of the ancient world. As in India, the wealth was very unequally distributed, and the result was the same—a nation of tyrants and slaves. This is shown partly by the stupendous and costly buildings which still remain; for “no wealth, however great, no expenditure, however lavish, could meet the expense which would have been incurred if they had been the work of free men, who received for their labour a fair and honest reward. The people at large were little better than beasts of burden; and all that was expected from them was an unremitting and unrequited labour.” The reckless prodigality of labour may be conceived, when we know that 2000 men were occupied three years in carrying one stone from Elephantine to Sais; that one canal cost the lives of 120,000 men; and that 360,000 men were engaged for twenty years building one of the pyramids. Instead, then, of viewing these mighty works as evidences of a high state of civilization, we must consider them as signs of a condition almost utterly depraved and barbarous.

In America, the same laws have been found to prevail. The earliest civilizations were located in only those parts which were at once hot and moist—two conditions causing abundant fertility,

and consequent plenty. What rice was to India, and the date to Egypt, that was maize to the inhabitants of Mexico and Peru. The returns of this plant are enormous, averaging in New California seventy or eighty-fold, and in Mexico Proper, three, four, and even eight hundred-fold. The same results occurred here as in India and Egypt—the upper classes were tyrants; the lower, slaves; and there was little or no medium. The arts were cultivated with some success, but there was no power of diffusion in the scanty civilization which they possessed; there was no such thing as public opinion, but a stern despotism of the higher classes, and a slavish subserviency of the lower, who were separated from the former by the impassable barriers of *caste* and legislation. The expenditure of labour was as lavish as in Egypt: the erection of the Royal Palace of Peru occupied 20,000 men for fifty years; and that of Mexico cost the labour of 200,000 men.

The natural advantages of heat and moisture may, however, be so much in excess as to prevent any form of civilization whatever. Such is the case in Brazil, which, from its situation and natural advantages, might be expected to have been the seat of such civilization as similar physical causes had produced in other parts of the world. But the moisture here is in excess; the trade wind pours deluges of rain upon the country, producing the most destructive torrents at certain times. This abundant supply of water, aided by the vast river system and the heat of the climate, stimulates the earth into a productive activity unequalled in any other part of the world. In his description of Brazil, Mr. Buckle evinces descriptive powers of no ordinary kind. We make no apology for quoting at length:—

“Brazil, which is nearly as large as the whole of Europe, is covered with a vegetation of incredible profusion. Indeed, so rank and luxuriant is the growth, that nature seems to riot in the very wantonness of power. A great part of this immense country is filled with dense and tangled forests, whose noble trees, blossoming in unrivalled beauty, and exquisite with a thousand hues, throw out their produce in endless prodigality. On their summit are perched birds of gorgeous plumage, which nestle in their dark and lofty recesses. Below, their base and trunks are crowded with brushwood, creeping plants, innumerable parasites, all swarming with life. There, too, are myriads of insects of every variety; reptiles of strange and singular form; serpents and lizards spotted with deadly beauty; all of which find means of existence in this vast workshop and repository of nature. And that nothing may be wanting to this land of marvels, the forests are skirted with enormous meadows, which, reeking with heat and moisture, supply nourishment to countless herds of wild cattle, that browse and fatten on their herbage; while the adjoining plains, rich in another

form of life, are the chosen abode of the subtlest and most ferocious animals, which prey on each other, but which, it might almost seem no human power can hope to extirpate. Such is the flow and abundance of life by which Brazil is marked above all the other countries of the earth.

"But amid this pomp and splendour of nature, no place is left for man; he is reduced to insignificance by the majesty with which he is surrounded; the forces that oppose him are so formidable, that he has never been able to make head against them—never able to rally against their accumulated pressure. The whole of Brazil, notwithstanding its immense apparent advantages, has always remained entirely uncivilized—its inhabitants wandering savages, incompetent to resist those obstacles which the very bounty of nature has put in their way. . . . The progress of agriculture is stopped by impassable forests, and the harvests are destroyed by innumerable insects. The mountains are too high to scale, the rivers are too wide to bridge; everything is contrived to keep back the human mind, and repress its rising ambition. It is thus that the energies of nature have hampered the spirit of man."—(pp. 94-6.)

The whole of the immense territory of Brazil, more than twelve times as large as France, contains only about six millions of inhabitants; and these are in the same state of barbarity as they ever were, no sign of progress or civilization being manifest.

Such are the relations in which, according to Mr. Buckle's view, the two elements, soil and climate, bear to civilization, more particularly in the aspect of the accumulation and distribution of wealth. And in precisely the same relation to the accumulation and distribution of thought does he conceive the aspects of nature to stand:—

"It now remains (says he) for me to examine the effect of those other physical agents to which I have given the collective name of Aspects of Nature, and which will be found suggestive of some very wide and comprehensive inquiries into the influence exerted by the external world in predisposing men to certain habits of thought, and thus giving a particular tone to religion, arts, literature, and, in a word, to all the principal manifestations of the human mind."

We shall endeavour to give a succinct account of our author's views on this point; only premising that in this, as in the subjects just discussed, he falls into the error of mistaking those circumstances which *favour* any particular development, mental or physical, for the *efficient and prime cause* of such development. This error is natural and inevitable in any mind which places its trust in nature and man alone, recognising no overruling agency, nor, in short, any principle whatever save *natural progress*.

The aspects of nature influence the mind in a twofold manner—through the imagination and through the reason. With regard

to natural phenomena, whatever inspires terror or wonder, and excites ideas of the vague and uncontrollable, has a tendency to stimulate the imagination, and to dominate over the reasoning faculties. Man then feels his inferiority to nature; and "his mind, appalled by the undefined and indefinable, hardly cares to scrutinize the details of which such imposing grandeur consists." On the other hand, when the phenomena of nature are less imposing, and the physical aspects of a country more under the control of man, the imagination is less excited; man becomes able to experiment upon the powers of nature—to bring them in some sort into subjection to him; and the result is, that *reason* asserts her sway. It is thus that the earlier civilizations, being all seated near the tropics, where the aspects of nature are most sublime and terrible, were marked by much superstition, and a great development of the imaginative faculties. Earthquakes are amongst the most fearful of the cosmical phenomena, and "there can be no doubt as to the effect they produce in encouraging particular associations and habits of thought." The mind becomes anxious and timid, and oppressed with a sense of its own helplessness. "Human power failing, superhuman power is called in; the mysterious and the invisible are believed to be present; and there grow up among the people those feelings of awe and of helplessness on which all superstition is based, and without which no superstition can exist." Wherever these and analogous phenomena exist, the imagination dominates over the reason, and produces its natural effects upon the psychical manifestations in the form of superstition, and in the development of the fine arts rather than of the sciences. Thus Spain, Portugal, and Italy—the countries of Europe where earthquakes are most frequent—have produced most of the great painters and sculptors of Europe. The purely reasoning faculties are undeveloped, and it is here that superstition has taken its deepest hold of the people. In some other countries, all serious dangers are viewed as supernatural occurrences, and are not only submitted to, but worshipped; as is the case amongst some of the Hindus.* Some, from feelings of reverential fear, refuse to destroy wild beasts and noxious animals.

"Summing up these facts, it may be stated that, in the civilizations exterior to Europe, all nature conspired to increase the authority of the imaginative faculties, and weaken the authority of the reasoning ones. . . . In Europe this law is opposed by another diametrically opposite, by virtue of which the tendency of natural phenomena is, on the whole, to limit the imagination and embolden the understanding;

* The Hindus in the Iruari forests (says Mr. Edye) worship and respect everything from which they apprehend danger.

thus inspiring man with confidence in his own resources, and facilitating the increase of his knowledge, by encouraging that bold, inquisitive spirit which is constantly advancing, and on which all future progress must depend."—(pp. 118-9.)

The civilization of Europe has diverged from all those that preceded it; and this is supposed to be owing to the operation of the causes alluded to, since—1. There are certain natural phenomena which act on the human mind by exciting the imagination; and 2. These phenomena are much more numerous out of Europe than in it. The mode of operation of these phenomena is illustrated by their effects upon the literature, religion, and art of India and Greece respectively, "these being the two countries respecting which the materials are most ample, and in which the physical contrasts are most striking."

The ancient literature of India is marked by the ascendancy of an imagination luxuriant even to disease. Almost the whole of their writings are poetical: their works on grammar, law, history, medicine, mathematics, geography, metaphysics, are all in a regular system of versification. Their geographical and chronological systems, apparently the least likely to be so affected, are full of imaginative flights, connected with an exaggerated respect for past ages, and a belief in the extraordinary longevity of ancient times.* The Institutes of Menu also are said to have been revealed to man about two thousand million years before the present era.

"Not only in literature, but also in religion and art, this tendency (to exaggeration) is supreme. To subjugate the understanding and exalt the imagination is the universal principle. In the dogmas of their theology, in the character of their gods, and even in the form of their temples, we see how the sublime and threatening aspects of the external world have filled the minds of the people with those images of the grand and terrible, which they strive to reproduce in visible form, and to which they owe the leading peculiarities of their national culture."

* The common duration of life was 80,000 years; holy men lived 100,000 years; some of the poets lived to the age of half a million. But all these are short lives compared to that of "a very shining character in Indian history, who united his single person the functions of a king and a saint. This eminent man lived in a pure and virtuous age, and his days were indeed long in the land, since when he was made king he was 2,000,000 years old: he then reigned 6,800,000 years having done which, he resigned his empire, and lingered on for 100,000 years more."—*Asiatic Researches*.

Mr. Buckle on this subject takes the opportunity of classifying the Hebrew and Christian writings with these fables. "A belief in the longevity of the human race, at an early period of the world, was the natural product of the feelings which ascribed to the ancients an universal superiority over the moderns and this we see exemplified in some of the Christian, and in many of the Hebrew writings. But the statements in these works are tame and insignificant when compared with what is preserved in the literature of India."—(pp. 122-3.)

Whilst such are the effects of the wondrous and fearful works of nature in India, in Greece the aspects of nature are so different, that "the very conditions of existence are changed." The country is of small extent, easy of access from others; the mountains are less, the streams are smaller; earthquakes are less frequent, the climate more healthy, hurricanes less disastrous, wild beasts and noxious animals less abundant. Thus, whilst in India the tendency of natural phenomena was to inspire fear, in Greece it was to give confidence.

"In Greece, therefore, the human mind was less appalled and less superstitious; natural causes began to be studied; physical science first became possible; and man, gradually waking to a sense of his own power, sought to investigate events with a boldness not to be expected in those other countries, where the pressure of nature troubled his independence, and suggested ideas with which knowledge is incompatible."—(p. 127.)

Whilst the deities of both India and Greece retain somewhat of human attributes, in the former they are all exaggerated into images of the extremest terror,* whilst in the latter they were all strictly human; stronger, or more beautiful than man they might be, but still never grotesque. The actions of the Indian gods were all preternatural; those of Greece had human tastes, pursuits, and passions, and most of them were merely embodiments of the emotional ideas. In Greece, also, we first meet with hero-worship, the approximation of humanity to deity. "In Greece, for the first time in the history of the world, the imagination was in some degree tempered and confined by the understanding. . . . Whether or not the balance was accurately adjusted, is another question; but it is certain that the adjustment was more nearly arrived at in Greece than in any previous civilization."

We cannot pause to trace the resemblance between the evolutions of these laws in the other ancient civilizations; but having arrived at the verge of the permanent forms of civilization, we must now follow our author in his investigation of the influence of mental laws upon the progress of society, under the twofold aspect of *moral* and *intellectual* development. Mr. Buckle in the outset recognises this division, "for" (says he) "there can be no doubt that a people are not really advancing, if, on the one hand, their increasing ability is accompanied by increasing vice; or if, on the other hand, while they are becoming more virtuous, they

* Siva is a hideous being, with a girdle of snakes, a human skull in his hand, and with a necklace of human bones. He has three eyes, is clothed in a tiger's skin, and over his left shoulder the deadly cobra di capello rears its head. His wife, Doorga, is still more revolting in appearance, and has an insatiable appetite for blood.

likewise become more ignorant." Acknowledging, then, the necessity for the mutual working together of these two elements, morality and intellect, Mr. Buckle proceeds to inquire which of the two is the "more important." Guarding at first against the interpretation of "natural progress" into a progress of natural capacity, which may or may not be the case, and at all events is not proved, he shows that this progress is one of *opportunity*—of external advantage, not of internal power. It is here that Mr. Buckle's most dangerous subtleties commence. On this seemingly innocent basis he founds an argument, feeble yet plausible, abounding in sophistry, by which he attempts to prove the very small influence which morals exert upon the progress of societies. The line of reasoning is to this effect:—The moral and intellectual conduct of the aggregate of men is regulated by the moral and intellectual notions prevalent in their time. Some will go beyond, some will fall short of this standard; but, generally, this will be the rule. Now, this standard is continually varying; the paradox or heresy of one period is the received doctrine of the next: a mutability which shows that "the conditions on which the standard depends must be themselves very mutable; and these conditions, whatever they may be, are evidently the originators of the moral and intellectual conduct of the great average of mankind." Knowing, then, that the main cause of human actions is necessarily extremely variable, if any set of circumstances claim to be such cause, we have but to apply the test of variability, in order to adjudicate on their claims. The next step in the argument is so daring in its unscrupulous assertions, that we give it at length in the writer's words:—

"Applying this test to moral motives, or to the dictates of what is called moral instinct, we shall at once see how extremely small is the influence those motives have exerted over the progress of civilization. For there is, unquestionably, nothing to be found in the world which has undergone so little change as those great dogmas of which moral systems are composed. To do good to others; to sacrifice for their benefit your own wishes; to love your neighbour as yourself; to forgive your enemies; to restrain your passions; to honour your parents; to respect those who are set over you—these and a few others are the sole essentials of morals; but they have been known for thousands of years, and not one jot or tittle has been added to them by all the sermons, homilies, and text-books which moralists and theologians have been able to produce."—(p. 163.)

It is added, in a note to this passage:—

"That the system of morals propounded in the New Testament contained no maxim which had not been previously enunciated, and that some of the most beautiful passages in the Apostolic writings are

quotations from Pagan authors, is well known to every scholar; . . . and to assert that Christianity communicated to man moral truths previously unknown, argues, on the part of the assertor, either gross ignorance or wilful fraud."

And, as a quotation from Sir J. Mackintosh:—

"More than 3000 years have elapsed since the composition of the Pentateuch; and let any man tell me, if he is able, in what important respect the rule of life has varied since that distant period. The fact is evident, that no improvements have been made in practical morality."

This assumed stationary character of morality is contrasted forcibly with the advance of the intellectual sciences; and then comes the conclusion, that as civilization is the product of moral and intellectual agencies, and "since that product is constantly changing, it evidently cannot be regulated by the stationary agent,"—and, therefore, the only other agent being the intellectual one, this *must be and is* the real mover of all civilization. The good or evil works of men or states die with them(!), but the intellectual contributions are preserved, and become "the heir-looms of mankind—the immortal bequest of the genius to which they owe their birth." These remarkable views are modestly summed up as follows:—

"These conclusions are, no doubt, very unpalatable; and what makes them peculiarly offensive is, that it is IMPOSSIBLE TO REFUTE THEM. For the deeper we penetrate into this question, the more clearly shall we see the superiority of intellectual acquisitions over moral feelings."
—(p. 166.)

Although these arguments are such that Mr. Buckle is "quite unable to see on what possible ground their accuracy is to be impugned," we must confess them to be far otherwise than convincing. We hesitate which most to admire in all this—the arbitrary manner in which Mr. Buckle excludes the Maker from all participation in the conduct of the affairs of His creatures; the gratuitous assumption that his classification of the sources of human action is and must be an exhaustive one; the feeble inefficiency of method in the argument built upon so sandy a foundation; the self-complacency with which the conclusions are deemed irrefragable; or the threefold crowning error, in *fact*, in *inference*, and in *philosophy*, with which the ingenious structure is completed. We are indebted to him, however, for *one* classification which we *do* accept as exhaustive—viz., the division of the motives for misrepresentation into "*gross ignorance* or wilful fraud;" we accept it, and proceed to show that he himself is amenable to one or other of the allegations.

Firstly, in reference to the error as to *fact* with which we charge the author.

When Mr. Buckle alleges that the laws of morality have always remained the same, or have been unaltered for thousands of years, since the composition of the Pentateuch, and that Christianity revealed nothing new, can he possibly be ignorant that the Great Author of our faith, in his personal ministry, changed the entire spirit of the Mosaic law? Speaking to a people who were jealous of the slightest misinterpretation of their law, and who were intently watching for some grounds for accusation against him, he stated that the social spirit of their Levitical code was "an eye for an eye, and a tooth for a tooth." And who had ever heard in the Heathen world of such a law as that which was then and there substituted for this—"Resist not evil; LOVE your enemies; BLESS them that curse you; PRAY for them which persecute you?" Is Mr. Buckle "grossly ignorant" of this, or is his statement a "wilful fraud"?

So much as to the error in fact, of which many other illustrations might be given; but this is sufficient to show the loose, careless manner in which our author treats all matters which do not tend directly to the support of his foregone conclusions.

But, even supposing, for the sake of argument, that the moral law was a constant quantity; is its PROGRESSIVE RECOGNITION, and its *reception* as a rule of life, to count for nothing in man's progress? Because constant, is it inoperative, where, by means of teaching from without, or more energetic inculcation within, it is more forcibly impressed upon a community? Apply the same hypothesis to intellectual attainments: suppose that the entire present knowledge of European science could be transfused at once into China or some other Asiatic nation, the absolute grade of human knowledge would not be advanced one step, yet the nation would be greatly advanced in civilization. The laws of nature have been the same from the foundation of the world; it is only the ever-increasing *recognition* of them which has produced intellectual development—only their *application* to art and science which has led to the advance in them. And so, although the moral law may have been constant for two thousand years, it is to its *recognition* that we look for the progress of humanity on a fixed basis.

The third error—that in philosophy—is connected with the assumed superiority of the intellect over the moral nature, because the one is *cumulative* in its results, and the other not so. The *fact* is doubtless so in one point of view—we do not recognise moral truth more readily nor clearly because others have recognised it before us; whilst intellectual truths, being con-

stantly appropriated and made subservient to the uses of man, to his physical, moral, and spiritual desires, become permanent in the form of the machinery of society. But not on this account are the intellectual laws to be esteemed superior to the moral.

"It is exactly in proportion as intellectual power is capable of yielding fruits which are *non-intellectual*, that it is more cumulative than moral or spiritual power. In other words, so far as the intellect can be made the effective instrument of other human desires and capacities beside the intellect, so far is it more cumulative than faculties which have no end out of themselves. But this is only saying that intellectual agencies are subsidiary and instrumental to moral and spiritual agencies, while the latter are not subsidiary and instrumental to the former. . . . The intellectual laws are, in fact, immediately subordinated to the physical, moral, and spiritual desires. . . . The intellect is cumulative in Mr. Buckle's sense, only because its results are fitly instrumental to desires that are other than intellectual; while the *higher capacities* of human nature have their fittest ends only in themselves, and are utterly distorted and defaced by being made the instruments of lower capacities."*

Mr. Buckle illustrates his principles by the decline of what he considers the two greatest evils that have ever afflicted humanity—viz., religious persecution and war. As to the former, he considers that he has proved that it is essentially an intellectual process, and that no good could be effected by the operation of moral feelings.

"The causes of the decline of the warlike spirit . . . is owing to the increase of the intellectual classes, to whom the military classes are necessarily antagonistic. In pushing the inquiry a little deeper, we have, by still further analysis, ascertained the existence of three vast though subsidiary causes, by which the general movement has been accelerated. These are, the invention of gunpowder, the discoveries of political economy, and the discovery of improved means of locomotion. . . . We are bound to infer that the two oldest, greatest, most inveterate and most widely-spread evils which have ever been known, are constantly, though, on the whole, slowly diminishing; and that their diminution has been effected not at all by moral feelings nor by moral teachings, but solely by the activity of the human intellect, and by the inventions and discoveries which, in a long course of successive ages, man has been able to make."

Mr. Buckle also pledges himself to show, in his future volumes, that the progress which Europe has made from barbarity to civilization is "entirely due to its intellectual activity," and that

* "National Review," January, 1858. We owe an apology to the able writer of the Article on "Civilization and Faith," for appropriating his expressions on this subject.

to St. Augustine and other missionaries, who came for the express purpose of making us Christians."

It may be asserted that we were not savages; but whether we consider the religion of a nation in the light of *cause* or *symptom* of its condition, we may feel certain that the Druid faith can only coexist with a very low development of intellect, and is incompatible with any high form of civilization. Mr. Buckle gives some illustrations of his views of the introduction of religion too pure for the intellectual state of the people, which appear to us much more rash and bigoted than many of the opinions of which he complains, and irreverent in the extreme from their utter disregard of all those principles which are held sacred in a Christian land. He presupposes that it is a mark of the utmost intolerance to blame a person for irreverence, because he does not revere what we do. But he who, in a Christian country, takes every opportunity of sneering at the faith and creed of that country, must expect to meet with the natural return. The doctrine of "One God (says he), taught to the Hebrews of old, remained for many centuries altogether inoperative. The people to whom it was addressed had not yet emerged from barbarism; they were, therefore, unable to raise their minds to so elevated a conception." In other words, the revealer of that religion committed a great mistake. Because of the lapse into idolatry which so often characterized this people, Mr. Buckle can quietly overlook the potency of those influences which for three thousand years have kept the Jews a "peculiar people, separate from all the other nations. In like manner, the introduction of the Christian religion was altogether an anachronism and a mistake:—

"The Romans were, with rare exceptions, an ignorant and barbarous race; ferocious, dissolute, and cruel. For such a people, Polytheism was the natural creed; and we read, accordingly, that they practised an idolatry which a few great thinkers, and only a few, ventured to despise. The Christian religion falling among these men found them unable to appreciate its sublime and admirable doctrine. And when, a little later, Europe was overrun with fresh immigration the invaders, who were even more barbarous than the Romans, brought with them those superstitions which were suited to their actual condition. It was upon the materials arising from these two sources that Christianity was now called to do her work. The result is most remarkable; for after the new religion seemed to have carried all before it, and had received the homage of the best part of Europe, it was soon found that nothing had been really effected."

It will be observed that we have not often interrupted the course of this analysis to give *historical* refutations of the glaring

under the head of "*tampering*" with natural progress ; considers the religion, literature, and government of nations merely as symptoms ; and attributes no influence, save a deleterious one, to any efforts made from without to assist in the amelioration of a debased condition.

"Out of a certain condition of society, certain results naturally follow. Those results may, no doubt, be tampered with by some external agency ; but if that is not done, it is impossible that a highly-civilized people, accustomed to reason and to doubt, should ever embrace a religion of which the glaring absurdities set reason and doubt at defiance." . . . "The truth is, that the religious opinions which prevail in any period are among the symptoms by which that period is marked. When the opinions are deeply rooted, they do, no doubt, influence the conduct of men ; but before they can be deeply rooted, some intellectual change must have taken place. We may as well expect that the seed should quicken in the barren rock, as that a mild and philosophic religion should be established among ignorant and ferocious savages."—(p. 233.)

It naturally follows, that the author throws all possible discredit upon missionary enterprise and narrative, inasmuch as a broad denial of the accuracy of these statements is quite necessary for the support of his doctrine. Yet, accustomed as we had become to his habit of dogmatism and rash assertion, we were somewhat startled on meeting with the following passage :—

"After a careful study of the history and condition of barbarous nations, I do most confidently assert that there is no well-attested case of any people being permanently converted to Christianity, except in those very few instances where missionaries, being men of knowledge as well as men of piety, have familiarized the savage with habits of thought, and, by thus stimulating his intellect, have prepared him for the reception of those religious principles which, without such stimulus, he could never have understood."—(p. 234.)

And this is written by an inhabitant of England, a country of all others affording the most remarkable refutation of such an assertion ! For what were the people of England but idolatrous barbarians before St. Augustine's mission ? And we hear nothing of his having familiarized the savages of our island with habits of thought before he preached to them the pure Gospel of the kingdom. Let us hear what a recent writer, an enemy to missions, if not to Christianity itself, says :—

"Beginning with the early times, however, we are first struck with the thought of what we ourselves owe to missionary enterprise. In the south of England and in Ireland, there was probably some early preparation, by the influx of persecuted Christians from the Continent ; but the great release from the iron rule of Druid caste-tyranny we owe

to St. Augustine and other missionaries, who came for the express purpose of making us Christians."

It may be asserted that we were not savages; but whether we consider the religion of a nation in the light of *cause* or *symptom* of its condition, we may feel certain that the Druid faith could only coexist with a very low development of intellect, and is incompatible with any high form of civilization. Mr. Buck gives some illustrations of his views of the introduction of religion too pure for the intellectual state of the people, who appear to us much more rash and bigoted than many of the opinions of which he complains, and irreverent in the extreme from their utter disregard of all those principles which are held sacred in a Christian land. He presupposes that it is a mark of the utmost intolerance to blame a person for irreverence, because he does not revere what we do. But he who, in a Christian country, takes every opportunity of sneering at the faith and creed of that country, must expect to meet with the natural return. The doctrine of "One God (says he), taught to the Hebrews of old, remained for many centuries altogether ineffectual. The people to whom it was addressed had not yet emerged from barbarism; they were, therefore, unable to raise their minds to so elevated a conception." In other words, the revelation that religion committed a great mistake. Because of the lapse into idolatry which so often characterized this people, Mr. Buck can quietly overlook the potency of those influences which for three thousand years have kept the Jews a "peculiar people" separate from all the other nations. In like manner, the introduction of the Christian religion was altogether an anachronism and a mistake:—

"The Romans were, with rare exceptions, an ignorant and barbarous race; ferocious, dissolute, and cruel. For such a people, Paganism was the natural creed; and we read, accordingly, that they practised an idolatry which a few great thinkers, and only a few, ventured to despise. The Christian religion falling among these men found them unable to appreciate its sublime and admirable doctrine. And when, a little later, Europe was overrun with fresh immigration the invaders, who were even more barbarous than the Romans, brought with them those superstitions which were suited to their actual condition. It was upon the materials arising from these two sources that Christianity was now called to do her work. The result is most remarkable; for after the new religion seemed to have carried all before it, and had received the homage of the best part of Europe, it soon found that nothing had been really effected."

It will be observed that we have not often interrupted the course of this analysis to give *historical* refutations of the glaring

errors into which our author, by viewing casualties as essentials, and essentials as casualties, is perpetually falling. But here we must examine the question in a little more detail. Perhaps from Mr. Buckle's point of view, considering all religion as entirely secondary and subordinate to intellectual development, and all morality as nearly inoperative in society, it may seem that *nothing was done* when a pure form of religion (with certain growing corruptions) was introduced in the place of one which permitted all society to be one mass of corruption. "The Roman empire included," says Shaftesbury, "a race of men who seemed to vie with each other in the commission of as grand crimes, and in the perpetration of as odious vices, as ever disgraced humanity." Vice was national, sanctioned by the highest examples, followed by the lowest of the people, soaking through every grade of society. The satirists of those days present a picture of society unfit to translate, almost even to allude to. "Murder, and every variety of unutterable crime characterized that declining age; and had not the Almighty mercifully interposed, the human race ran the risk of being extinguished by the pressure of its own detestable vices."—*Fraser*. That the introduction of Christianity did not do all that might have been hoped in a better state of society, is matter of history; but to say that "nothing was done," argues either "gross ignorance or wilful fraud," in the face of the edicts of the Emperor Constantine alone, the practical benefits of which were immediate and visible. For, says the writer just quoted, "the laws concerning slavery were remodelled and mitigated, abduction and adultery were visited with severe punishments, divorce was subjected to intelligible restrictions, and some of the more obvious vices of the age were removed by the improved tone of public opinion."

We cannot enter more deeply into the question why Christianity failed to regenerate man completely; to do so would require volumes, instead of pages; but we notice this one point to show how Mr. Buckle slurs over all history which is not in accordance with his theory of development, and then proves from this *historia expurgata* that his theory must be the true one. Let us, however, before leaving the subject, retort upon him by asking, if Christianity did so little, what was the much-boasted "natural progress" doing? What of the intellectual activity, to the effects of which Mr. Buckle pledges himself to trace *all the progress* that Europe has made in civilization? * Why did the gorgeous civilizations of Greece and Rome decay? Was it that the intellectual activity of the Golden Age was less than in the

* See p. 204.

days of the commonwealth of Rome? Was it that the Socrates, of Plato, of Pythagoras, Pindar, Æschylus, Sophocles, Euripides, of Herodotus and Xenophon, was an age of stagnation and decay? Were not these times when the faculties of man were developed to an extent since unknown when thought received an impulse, and a direction, and which have never ceased to operate upon it? In one at least of these empires, also, there was, in addition to its intellectual activity, a powerful middle class, and a "public opinion." Yet the empire fell, and upon its ruins wandering hordes of barbarians fixed their seat. Why was this? In answering the question we will strictly follow Mr. Buckle's method of induction.*

If the causes of progress in civilization are moral and intellectual, the causes of decay are necessarily of the same order and depend upon a deficiency of one or other element. But we see that at the times of the decay of the Greek and Roman empires the intellectual element was in full vigour, we are compelled to attribute the phenomenon to the absence of the other element—a theory which will be amply supported by the evils of the times themselves; for, "among the people the most blushing and disgusting profligacy was common, with all immorality and all the vices that can disgrace human nature. To this general corruption of manners may be added, levity of character, a total disregard of decency, laxity of social relations, and grossness of political institutions. Such were the causes of the downfall"† of these empires. Thus, by his own method the author is confuted; and, like him, we are "quite unable to imagine on what possible grounds" the force of this view can be contested.

Religion, literature, and government are classed by Mr. Buckle as "disturbing causes"‡ in civilization. In reference to the second, the same views are promulgated as those on the

* "Since civilization is the product of moral and intellectual agencies, and as that product is constantly changing, it evidently cannot be regulated by a stationary agent; because, when surrounding circumstances are unchanged, a stationary agent can only produce a stationary effect. The only other agent is the intellectual one; and that this is the real mover, may be proved in two distinct ways because being, as we have already seen, either moral or intellectual, and because we have also seen, not moral, it must be intellectual; and secondly, because the intellectual principle has an activity and a capacity for adaptation, which I undertake to show, is quite sufficient to account for the extraordinary progress that, during several centuries, Europe has continued to make."—(p. 165.)

† "By each successive analysis, the field of the inquiry has been narrowed, and we have found reason to believe that the growth of European civilization is due to the progress of knowledge, and that the progress of knowledge depends on the number of truths which the human intellect discovers, and on the extent to which they are diffused."—(p. 265.)

‡ Mackinnon's "History of Civilization," vol. i. p. 60.

‡ Vide p. 1.

Literature is "simply the form in which the knowledge of a country is registered." It is a symptom of the state of the people, not a cause of it. It is scarcely credible that the author seems to take no account of the influence of literature from without; nor does he dwell more on the effect of great lights within than this passing notice:—

"Individual men may of course take great steps, and rise to a great height above the level of their age. But if they rise beyond a certain point, their present usefulness is impaired; if they rise still higher, it is destroyed."

The author must have felt sensible of the feebleness of this part of his subject, when he wrote the following profound observations:—

"The truth is, that although Europe has received great benefit from its literature, this is owing not to what the literature has originated, but what it has preserved"! "Knowledge must be acquired before it can be written"! "Literature, in itself, is but a trifling thing, and is merely valuable as being the armoury in which the weapons of the human mind are laid up; and from which, when required, they can be drawn"! . . .

The same principles are applied to the third "disturbing cause," government, which is, or ought to be (in Mr. Buckle's view), nothing more than an exponent of popular progress. When it has attempted to be anything more than this, all "that it has done has been done amiss."

"The other opinion to which I have alluded is, that the civilization of Europe is chiefly owing to the ability which has been displayed by the different governments, and to the sagacity with which the evils of society have been palliated by legislative remedies. To any one who has studied history in its original sources, this notion must appear so extravagant as to make it difficult to refute it with becoming gravity. Indeed, of all the social theories which have ever been broached, there is none so utterly untenable, and so unsound in all its parts, as this."—(p. 250.)

A sufficient proof of this is supposed to be afforded by the repeal of the Corn Laws, and the Reform Bill, which, being in their origin popular movements, carried Government along with them. The whole system of taxation is repudiated, as utterly evil; the "laws in favour of industry have injured industry; the laws in favour of religion have increased hypocrisy; and the laws to secure truth have encouraged perjury;" and one main condition of the prosperity of a people is, "that its rulers shall have very little power, that they shall exercise that power very sparingly, and that they shall by no means presume to raise them-

selves into supreme judges of the national interests, or de themselves authorized to defeat the wishes of those for whom benefit alone they occupy the post entrusted to them."

In alluding to the history of the Middle Ages, Mr. Buckle finds three things to complain of—the art of writing, the change of religion, and the monopoly of history by a certain class. The art of writing was objectionable, because it enabled men to dispense with those invaluable old ballad-singers and their ballads; the change of religion, because it interrupted and interpolated the old traditions; and the third, "more powerful than all, was that history became monopolized by a class of men whose professional habits made them quick to believe; and who, moreover, had a direct interest in increasing the general credulity, since it was the basis upon which their own authority was built. These men are, of course, the priests and ministers of religion generally, at whom Mr. Buckle takes every opportunity of sneering. In fact, he speaks of all men who believe in an overruling Providence with the most lofty, yet pitying and wondering contempt. This is exemplified in his remarks on Comines:—

"This eminent politician, a man of the world, and skilled in the arts of life, deliberately asserts that battles are lost, not because the army is ill supplied, nor because the campaign is ill conceived, nor because the general is incompetent, but because the people or the prince are wicked, and Providence seeks to punish them. For," says Comines, 'war is a great mystery, and being used by God as the means of accomplishing His wishes, He gives victory, sometimes to one side sometimes to the other.' . . . The last vestige of this once universal opinion is the expression, which is gradually falling into disuse, 'appealing to the God of Battles.'"

In like manner, in the following chapter we meet with a section at all prayer or invocation of Divine assistance:—

. . . "We still see the extraordinary spectacle of prayers offered in our churches for dry weather or for wet weather; a superstition which to future ages will appear as childish as the feelings of pious men with which our fathers regarded the presence of a comet, or the approach of an eclipse. We are now acquainted with the laws which determine the movements of comets and eclipses, and . . . have ceased to pray to be preserved from them. But because our researches into the phenomena of rain happen to have been less successful, we resort to the impious (!) contrivance of calling in the aid of the Deity to supply those deficiencies in science which are the result of our own sloth; and we are not ashamed, in our public churches, to prostitute the rites of religion by using them as a cloak to conceal an ignorance we ought frankly to confess."

We are neither able nor disposed to contest these points with

Mr. Buckle; his intellectual creed is not ours; his faith is not our faith, nor his God our God; he who has sought so deeply into history will not be shaken by arguments of ours; he that holds that scepticism* is the great adjunct to civilization, and that expediency,† not truth, is the most to be desired politically, will not be ready to relinquish his principles for a despised and, as he supposes, expiring faith. As Nebuchadnezzar, in the pride of his wealth, looked upon the evidences of his riches, and said, "Is not this great Babylon that I have built by the might of my power?" so Mr. Buckle, in the pride of his inexhaustible stores of learning, seems to look forth upon the conditions of human existence, and say that human intellect is sufficient for all this. It is a common error, whilst life is young and strong within us, to believe in and be satisfied with secondary causes, and take no thought of the One Great Cause. But as the problems of life press upon us, and approach to their final solution, it is well that we discover that there is a want of something more than food, and intellect, and scepticism, and expediency. Happy is he to whom this discovery comes in time, and who finds that, let the nations rage as they will, there is indeed ONE that ruleth over the affairs of men.

It will be pleasant, in conclusion, to review the opinions of some others as to the bearing of morality and religion on civilization, that none may be left with the idea that high intellectual attainments tend, of necessity, to a disbelief in all religion as a means of ameliorating the condition of humanity. We will notice only three, whose names will certainly carry some weight—John Milton, Samuel Johnson, and Montesquieu.

Milton says that—

"A commonwealth ought to be but as one huge Christian personage, one mighty growth and stature of an honest man, as big and compact in virtue as in body; for look what the grounds and causes are of single happiness to one man, the same ye shall find them to a whole state, as Aristotle, both in his *Ethics* and *Politics*, from the principles of reason, lays down. By consequence, therefore, that which is good and agreeable to the true welfare of every Christian, and that which can be justly proved hurtful and offensive to every true Christian, will be evinced to be alike good or hurtful to monarchy; for God forbid that we should separate and distinguish the end and good of a monarch from the end and good of a monarchy, or of that from Christianity."—*Reformation in England*.

Dr. Johnson, speaking of calamities incident to a want of religion, says:—

"Discord must inevitably prevail among men who have lost all sense of Divine superintendence, and who have no higher motive of

* Vide p. 308.

† Vide p. 416.

action or forbearance than present opinion or present interest. Sure! there will come a time when every passion shall be put upon the guard by the dread of general depravity; when he who laughs at wickedness in his companion, *shall start from it in his child*; when the man who fears not for his soul, shall tremble for his possessions; when it will be discovered that religion only can secure the rich from robbery, and the poor from oppression,—can defend the State from treachery, and the Throne from assassination."

Let us, finally, hear the testimony of Montesquieu, than whom no one has thought more deeply upon, or entered more fully into the philosophy of nations:—

"Chose admirable! La religion Chrétienne qui ne semble avoir d'objet que la félicité de l'autre vie, fait encore notre bonheur dans celle-ci.

"C'est la religion Chrétienne qui malgré la grandeur de l'Empire et le vice du climat, a empêché le despotisme de s'établir en Ethiopie et a porté au milieu de l'Afrique les mœurs de l'Europe et ses loix. . . . Nous devons au Christianisme et dans le Gouvernement un certain droit politique, et dans la guerre un certain droit des gens, que la nature-humaine ne sauroit assez reconnoître."—*Esprit des Loix*.

Before taking final leave of Mr. Buckle, we will briefly review his theory, so as to present it in one view.

Man's civilization is first originated by—1. The nature of the soil, producing food in more or less abundance; 2. By the nature of the climate, influencing the energy and continuity of man's operations upon the soil—these two combining to originate an accumulation of wealth, without which there can be no leisure for thought, and therefore no civilization; and 3. By the aspects of nature, which are to the accumulation of thought, what soil and climate are to that of wealth.

The tropical civilizations are characterized, in consequence of the abundance and cheapness of food, by broad, impassable intervals between high and low—by tyranny and slavery; and in their mental aspect, by the marks of the ascendancy of physical agencies over man, in the development of the imagination and of superstition.

The European civilizations, on the contrary, are marked by the ascendancy of man over nature in the development of the reasoning faculties, and of free inquiry. Hence arises *intellectual progress*, the source of *all the advance* which Europe has made in civilization. In this, scepticism is a prime agent.

Religion, literature, and government are merely "disturbing causes," of which no account need be taken in respect of general or universal progress. Morals influence every individual, but not nations. Literature is a mere nothing. Government is a clog upon the wheels of progress.

Prayer is a folly or an impiety. Providence is an impossibility. Expediency is the proper end and aim of politics.

Such is the author's physical and mental creed. His bitterest scorn is reserved for Christianity. Truly it has been said—"L'homme pieux et l'Athée parlent toujours de religion; l'un parle de ce qu'il aime, et l'autre de ce qu'il craint."

It would appear almost sufficient for the refutation of this theory to have disentangled it from the enormous mass of learning from which it is evolved, and to have placed it in a clear, consecutive form. But it may be useful as briefly to indicate its errors and their sources.

The first and fundamental error is that of considering those circumstances which are merely *favourable to the development of civilization*, as actual "dynamics:" viewing, for instance, the abundance and cheapness of food as the efficient and final cause of the accumulation and distribution of wealth. For it is clear that, in the most prolific lands, there could be neither accumulation nor distribution of wealth were it not for the passions and desires—in other words, for the moral nature of man. What creates an enormously rich aristocracy and a people of slaves but the selfishness of man, and the absence of love and charity? Physical conditions may *favour*, but cannot create, such a state of things.

Another great and cardinal error is that of considering intellectual progress as the sole source of civilization in Europe. We have partly entered upon this subject before; but we may add one or two observations. It is an error to consider morals "stationary," and therefore unable to produce a "progressive" result. For it is almost too evident to require allusion, that, between the condition of the savage and that of the civilized man, there is quite as great a *moral* as an intellectual difference. And again, experience proves that intellect alone is unable to found a permanent civilization. For why, we again ask, did the civilizations of Greece and Rome decay at a time when intellect was more active than at any previous period? Mr. Buckle responds that the intellect was indeed active, but that there was no power of diffusion in it. True. But what is this but to say that intellect *of itself* has no diffusive power, consequently *of itself* no civilizing power? And upon what does this spirit of diffusion depend, but the presence amongst the intellectual classes of the constantly operative moral law of "loving our neighbour as ourselves?" It is the moral principle of self-negation, and love and charity to our fellow-creatures, that makes the difference between a diffusible and non-diffusible intellect. It is true that this moral law may be considered in effect the same—*i.e.*, stationary in all ages—but only as a theory; in practice it requires perpetual re-investi-

gation and perpetual *re-reception*. Its presence or absence in any community makes the difference between a permanent and transitory civilization; and this is equally in accordance with theory and experience.

But we go further than this, and assert that Mr. Buck entirely mistakes the philosophy of intellectual development, bearing upon the progress of nations. For intellect of itself is not necessarily expansive—it is *self-contained*; its improvement to some extent dependent upon the fruits of past intellect, but its immediate operation is upon individual minds, which do not necessarily impart their knowledge; so that intellect *may be*, as it is in its essence, *unsocial*. But not so with morals, for they have reference expressly to the relational faculties of man, and cannot be exercised *except* relatively to others. These, then, are of constant operation, and enter into and ramify through all societies and communities: whilst the communion of the intellect, however common or frequent it may be, is still not essential, but only voluntary and casual; and the spread of intellectual discoveries *never can* be due to the discoveries themselves, but only to the presence in the discoverer of an impulse arising from some ramification of the moral law, or in obedience to his own desires or passions. Love of fame, love of money, love of mankind—three of the great stimuli to the spread of intellectual discoveries—none of these are in any way intellectual, but have immediate reference to our moral nature.*

We say, then, that what has been proved to be true by experience is equally accordant with theory—viz., that intellect of itself, and disunited from a moral law, is, and must of necessity ever be, utterly inoperative in advancing, consolidating, or pre-

* We have dwelt upon the subject of the influence of the moral law on civilization at great length, for this reason—that it is chiefly to this influence that we look for the regeneration of the “*degenerate*” beings and races that mingle with and corrupt all grades of our civilized societies. Our meaning will be rendered more clear by a reference to the Essay on the “*Degeneracy of the Human Race*,” in this Journal, April, 1857. M. Morel thus speaks of moral treatment:—

“Le traitement moral qui n’est que l’application des devoirs imposés par la loi morale, divine, fixe et immuable, n’est pas une chose nouvelle. La propagation de cette loi, sa pratique, son application aux individus, selon leur âge et le degré de leur intelligence, ne sont pas non plus des fonctions exclusivement réservées à quelques hommes, et ne représentent pas davantage des devoirs que les uns sont libres d’accepter et les autres de rejeter. . . . Ceux qui sont chargés de l’appliquer, sont non seulement les moralistes, les prêtres, les magistrats, les instituteurs de la jeunesse, les médecins, mais le père de famille et les membres qui composent la famille.

“Sans doute, la loi morale n’est pas une chose nouvelle, mais l’exposé clair et méthodique . . . de toutes les questions qui ont trait à l’amélioration des masses, autrement dit, à leur *moralisation*, est une science encore toute nouvelle.”

Such are the opinions of one of our deepest and most philosophical thinkers on one of the most difficult problems connected with our social condition and prospects.

serving a civilization. Its inefficiency was proved in all the ancient civilizations, which, whilst intellect was in its most active state, died out for lack of faith, conscience, and a moral law, as a rule of national and private life. In modern times we have had but one instance of a highly-civilized state relapsing (temporarily) into a state of barbarism; and this was synchronous with a preternatural activity of the intellectual faculties, and a formal national rejection of the restraints of the moral law, and of its entire faith. Many other causes were in operation, of much too complex a nature to be analysed here; but the combination of these two elements clearly indicates that the lack *was not* in the deficiency of intellectual energy, and *might be* in the moral want. And with the thunder of the French Revolution still sounding in our ears, Mr. Buckle would assert that the literature of the Encyclopædia was "merely the record of the knowledge" of the people.

But we will cease our refutation of these flimsy paradoxes, and take our leave of Mr. Buckle with a cordial expression of our admiration for his vast learning and ability, and an undoubting trust that of the many who will be charmed with the literary merits of his work, but few will adopt his philosophy; but, above all, with an earnest hope that in later years he himself may be able to borrow a *mot* from a notorious character of our country, and, for the sake of truth and religion, be able to confess that he is not a Buckle-ite.*

The benefits of civilization are found in the improved moral, physical, and intellectual condition of a people, and the mode in which these improvements manifest themselves are patent to all; we need not weary our readers by recapitulating them. But these benefits are not without alloy. It seems to be a law of society that the happiness of the many shall involve the wretchedness of a few. Whilst comfort and riches are diffused on a more graduated plan, the more highly civilized is the community; yet it seems to admit, exceptionally, of greater misery amongst certain classes than even some forms of savage life. And this must continue to be the case so long as civilization is a state of *becoming*, and not *being*.

Civilization also introduces into society certain sources of sudden alternations of prosperity and adversity, which are unknown in savage life. An illustration of this is found in the tendency to speculation, of which such frightful examples have been before us of late years. On these and analogous points we need not dwell.

* John Wilkes, in his later years, being asked by the King after one of his former friends, replied, "Oh, please your Majesty, don't call him a friend of mine; he was a Wilke-ite—I never was."

M. Guizot, in his eloquent introductory lecture on "History of Civilization in Europe," acknowledges that one of the questions which may be asked about civilization is, whether it is a good or an evil—"for some bitterly deplore it, so rejoice at it." Although we do not hesitate in any degree to agree with him as to the magnitude of the blessings of civilization to the world, yet we see that in the transition periods evils of gigantic character do occur. Our limits compel us to confine ourselves to a brief notice of only two of these. The first is the effect of the contact of civilized with savage life; the second concerning the great increase of mental maladies proportionate to the advance of civilization.

The disappearance of entire races of men before the civilizing influences of the white man, is an established fact. It has been observed even in Europe, it is notorious in America, and also in Australia to a smaller extent. This is due to many and complicated causes. We introduce diseases amongst them to which they were strangers before, such as the small-pox, which has swept away whole tribes of the North American Indians. We introduce amongst them gunpowder and alcohol, in their effects as deadly as the small-pox. We cultivate their land; and the process once begun has no limits to the Teutonic race, save the nature of the soil and the climate. The native is driven before us, until one or other of these influences stops our progress. In America these results are very rapid; from the Atlantic to the Appalachian system, scarcely any vestige of the red man is to be found; from the latter to the Mississippi the same results are rapidly approaching. The red man is fast disappearing before the aggressions of his white brother; and in other parts of the world a similar process is taking place.

Yet, though these results emanate from civilized lands, they cannot be fairly considered the products of civilization, but rather of the *want* of that *true civilization* which, as we have been endeavouring to show, depends upon a due recognition of the moral law, keeping strict pace with the intellectual development. It is because there is not true love and charity and brotherhood between man and man, that these inhuman encroachments upon native privileges occur. And of these we shall see no more should the time ever happily arrive when civilization is firmly established upon the foundation of the moral law, which for one of its great roots has the command to "love our neighbour as ourselves." Yet, before that time arrives, it is to be feared that an interesting race of people will have vanished from the face of the earth, whom we may mourn, but cannot restore.

The second and last point connected with the evils attendant upon civilization which we propose to notice is, the very great

increase of insanity as civilization progresses. The following Table shows how great is the proportion of insane persons to the whole population in the most civilized cities, compared with that in those less so. The numbers refer to the population of some years back :—

	Population.	No. of Insane.	Proportion.
London ...	1,400,000	7000	1 in 200
Paris ...	890,000	4000	1 " 222
Milan ...	150,000	618	1 " 242
Florence ...	80,000	236	1 " 338
Turin ...	114,000	331	1 " 344
Dresden ...	70,000	150	1 " 466
Rome ...	154,000	320	1 " 481
Naples ...	364,000	479	1 " 759
Petersburgh..	377,046	120	1 " 3142
Madrid ...	201,000	60	1 " 3350
Cairo ...	330,000	14	1 " 23,571

It is not unlikely that there may be some error in the formation of some of these statistics; but with all allowance made for error, it is clear that the principal seats of civilization are those where insanity is most rife.

M. Brierre de Boismont, in a memoir upon "The Influence of Civilization on the Development of Insanity," comes to the following conclusions :—

1. Insanity is more frequent in proportion as civilization is more developed, and is more rare where the people is less enlightened.
2. Amongst the former, insanity is due to moral causes; amongst the latter, almost exclusively to physical causes.
3. A like distinction is observed in the civilized and uncivilized classes in the same community. Amongst the former, insanity is chiefly due to moral, in the latter to physical causes.
4. Every age and every country witnesses the origin of forms of insanity bearing the impress of the dominant ideas of that age or country, and having the seal of the epoch.
5. Every remarkable event, every grave public calamity, augments the number of the insane.
6. The increase of insanity is in relation to the development of the intellectual faculties, of the passions, of industry, of riches, and of misery.
7. As the amount of insanity is strictly in proportion to the amount of civilization, and is determined in great part by moral causes; moral means—especially those which will exercise a mild regulating influence over the passions—will form the principal basis of cure, especially in convalescence. And the chances of restoration will be the greater in proportion as the patients are

better instructed, and the social classes more enlightened. But as for this the strictest *surveillance* is requisite, the best result are to be expected from well-regulated and numerous establishments, founded and carried on upon these principles.

We will conclude this subject by some observations of Dr Feuchtersleben, which fully express our sentiments on the cause of this effect of civilization on insanity:—

“A practical proof of the morbid power of the emotions and passions is found in the frequent occurrence of psychopathies in time when all the elements of social life are in a state of fermentation; in and after revolutions, when sudden changes of fortune, loss of property worldly elevation and depression, fill the lunatic asylums, and (if Pariset be right) produce a thousand cases of mental disorder which in the general turmoil, remain unknown and unmentioned. And herein lies the answer to the question, why the number of mental diseases has increased with civilization?—a question which has certainly proved to be a fact. It is not civilization, but the increasing want which it brings in its train,—partial education, passions, emotions, &c., all which set the mind in passive motion; the forced culture to which they lead; the over-indulgence,—these contain the reasons of the fact. Civilization, as external education, is but a transition to culture as internal education; and in this first stage it produces evils for which it furnishes the remedy in the higher stages. It carries the poison and the antidote in the same hand.”

Thus have we attempted to trace the nature, progress, results, advantages, and evils of civilization. At some future time we propose to indicate the application of some of these principles to the regeneration of the fallen and dangerous classes of civilized societies.

ART. II.—THE LEGAL DOCTRINE OF RESPONSIBILITY IN CASES OF INSANITY, CONNECTED WITH AL- LEGED CRIMINAL ACTS.

BY FORBES WINSLOW, M.D., D.C.L.

Read at the Juridical Society, December 14th, 1857.

I WILL, without any prefatory remarks, and with great submission to those whom I have the honour to address, endeavour to direct the attention of the Society to the following salient and relevant questions connected with the important subject selected for discussion.

I will consider *seriatim*:—

1st. The nature of insanity in its medico-legal relations.

2nd. The legal doctrine of responsibility in connexion with insanity associated with alleged criminal acts.

3rd. The doctrine of partial insanity, or monomania.

4th. The existence of homicidal insanity and insane irresistible impulses.

5th. Anomalous or mixed cases of mental disorder, involving the question of modified responsibility and the propriety of punishment.

There is no fallacy more generally entertained by those who have had but limited opportunities of studying or becoming practically acquainted with the phenomena of insanity, than that, in the great majority of cases, the disease consists, in its elementary and *essential features*, in a disorder of the *intellectual*, as contradistinguished from a derangement of the *moral* faculties of the mind; that the intellect is in a condition of *aberration*; that the *ideas* are *perverted*; that the senses convey illusory images to the sensorium; that the perceptions are false, the mind being invariably under the dominion of some creation of the distempered fancy; in other words, that delusions or hallucinations are always present in every case of fully developed insanity.

This is the popular and, I may add, the generally received notion of mental derangement.

This mistaken view of the nature of insanity has, I believe, led to much discrepancy and conflict of opinion in our courts of law respecting the legal question of responsibility in connexion with certain cases of imputed alienation of mind.

In all the great criminal trials involving a consideration of this question, the judges have almost invariably laid a stress on the presence or absence of *delusion*; associating it, however, with the question, "Is the person whose mind is said to be insane, capable of distinguishing right from wrong?"

In the case "*Bainbridge v. Bainbridge*," Lord Campbell admitted that insanity might exist without delusion. I have no doubt other judges, if they have not propounded literally the same doctrine, have practically acknowledged its truth, by sanctioning the acquittal of prisoners on the ground of insanity unassociated with any obvious delusion or affection of the reasoning powers.

It is difficult for an inexperienced person to realise the great medical truth, that disease of the mind, and disease of a serious character, may exist *without any appreciable aberration of the ideas, or apparent impairment of what are termed the intellectual powers*. I do not refer to conditions of morbid mental exaltation, often dependent upon a transitory congestion of the blood-vessels on the surface of the brain, or to that mental depression so frequently consequent upon an obstruction to the free circulation of the blood through the heart, or even to the extravagance of thought and conduct exhibited in many cases of unrecognised

insanity; but to positive creations of the morbid fancy, to delusive images leading the person to believe that to exist which no sane person would believe to exist, and which, in reality, has no existence apart from himself and his distempered imagination.

In the majority of cases, the premonitory stage of insanity is evidenced by some palpable disorder of the affections, temper, propensities, moral sense, character, and conduct of the individual. This may exist for a long period before any positive aberration of the ideas is recognised.

It is unusual for delusions to exist in the early stage of mental derangement. The poison of insanity, if I may use the term, seizes, in the first instance, hold of the moral powers of the mind, and the disease often runs its course without obviously deranging the ideas, perceptions, or apparently impairing the integrity of the intellectual operations. Men talk coherently, and often with great shrewdness and sagacity, and they occasionally write rationally whilst in an indisputable condition of mental aberration of such a kind and degree as clearly to absolve them from all legal responsibility.

Although, as Dr. Prichard justly observes, "the intellectual faculties in every case of well-marked insanity are more or less involved;" and this will be apparent when I address myself to the question of partial insanity and the metaphysical doctrine of the indivisibility of the mind and unity of the consciousness; still he allows that "in reality the *moral character* is more affected than the *understanding*." In other words, he maintains that the salient, prominent, characteristic, and diagnostic symptoms of insanity are not to be sought for in those faculties of the mind by which (to speak with metaphysical exactness) *we appreciate the perception of relation*; but in those states and conditions of the intellect more immediately associated with the moral sense, the *affective* or *motive* faculties, the *passions, affections, and appetites*. As a general rule, insanity implicates those powers of the mind which are supposed to regulate the actions and conduct. The intellectual as well as the moral faculties (from the nature of the constitution of the human mind) are in all cases of insanity to a certain degree disordered; but the affection of the *reason, the judgment, and reflection*, does not in many cases stand out in bold and prominent relief, so as to constitute well-marked legal or medical diagnostic indications of the actual state of the mind when affected by disease. If this be a true theory of insanity, it will be apparent that, in estimating the actual condition of the mind in connexion with the question of legal responsibility, we must not confine our attention to the question, whether the *ideas* are perverted or in a state of positive

aberration or derangement; whether the senses are under the influence of subjective or objective morbid psychical phenomena, in the form of hallucinations or illusions; but the important point for consideration should be, what is the state of the *affective* or *motive* powers? what is the condition of the *volition*? and to what degree has the mental disease destroyed the healthy power of self-control over the thoughts and actions? If delusions are present—if hallucinations and illusions can be detected, the diagnosis is greatly simplified; but although delusions and aberration of the ideas often exist, *they must not be viewed as the essential or the exclusive diagnostic symptoms of a diseased and irresponsible mind.* If a man is said to be insane, the immediate question is, what are his delusions? If evidence is given of insanity in a court of justice, the same question is often put to the witness.

I do not complain of this course of interrogation; but I argue, *that by always searching for delusions and hallucinations, or some form of aberration and derangement of the mental operations,* we are diverted from the legitimate and philosophical course of inquiry, and a case of insanity, and insanity clearly inducing a state of criminal irresponsibility, eludes our observation.

I proceed to consider, secondly, *"the legal doctrines of irresponsibility in connexion with alleged criminal acts."*

This necessarily compels me to direct the attention of the Society to the lucid, logical, and able paper on Insanity in its Legal Relations, read by Mr. Fitzjames Stephen in the month of June, 1855, and since published in the Transactions of this Society. This gentleman, when speaking of legal tests of insanity, argues that medical men have no right to charge the judges with having propounded a fallacious "*test*" of insanity, or with inconsistency in excusing the insane on the one hand, whilst on the other they apply a criterion bringing nearly all those who are insane within the range of the law. The judges, it is said, have laid down no test of insanity whatever—that they have been most scrupulously cautious and careful in committing themselves to anything like a test of insanity. Instead of so doing, Mr. Stephen affirms they have merely laid down tests of *responsibility*, or, more strictly speaking, have specified facts from which, when juries have found them, judges are to infer malice; but it is no part of their duty to say how far particular diseases affect the relation of persons to such tests; that, in the language of Mr. Justice Maule, is a question not of law but of physiology, and one not of that obvious nature to be inferred without proof. The tests of insanity, as I conceive, propounded in our courts of law, are as follows, viz.:—

1st. That of the presence of delusion.

2nd. Of delusion directly associated with the criminal act.

3rd. A capability of distinguishing between what is lawful and unlawful—the capacity of knowing right from wrong, good from evil.

All these legal *criteria* of insanity necessarily involve in the elucidation the question of responsibility.

It is true, as Mr. Stephen argues, that, stripped of all technicalities, the transaction, as between the criminal arraigned for the crime and the prosecution, stands thus:—

The prosecutor says, "I charge this man with having voluntarily and wickedly killed A. B." The prisoner replies, "I did kill him, but not voluntarily or wickedly; for I was compelled by the involuntary action of my muscles, and exercised no volition in the matter; or, I was prevented by disease from distinguishing good from evil, and, therefore, could not act wickedly. But does not this trial of the question, whether the accused, for reason of his incapacity, could not act feloniously, unavoidably raise the questions, what is the nature of this incapacity? how it manifested? what are its symptoms? is it partial or general incapacity? is it associated or dissociated with delusions? does the mental disorder destroy the prisoner's power of distinguishing between what is "lawful and unlawful," "good and evil," "right and wrong?" Am I not justified in maintaining, without arguing the question in a "*Nisi prius*" spirit, that legal tests of insanity connected with alleged criminal acts have at various times been propounded from the bench for the guidance of juries?"

Dr. Johnson defines the word "test," as being "that by which anything is compared in order to prove its genuineness."

It is true, as Mr. Justice Maule says in the passage quoted by Mr. Stephen, that the questions submitted to the jury are the questions of fact which are raised on the record. In a criminal trial the question commonly is, whether the accused be Guilty or Not Guilty?

"The jury are to inquire into nothing which is not in issue. They are impanelled to decide certain questions of fact in the negative or affirmative, and nothing is admissible in evidence unless it tends to enable them to answer these questions, or some of them.

"The questions are raised by the prosecutor and the prisoner—the prosecutor affirming certain facts respecting the prisoner and the prisoner either confessing or denying them, or alleging some reason why he should neither confess nor deny. Such denial, confession, or allegation, is the prisoner's plea; and if it raises a question, asserted on one side and denied on the other, the jury are to decide it. First, then, madness is not a plea

The prisoner does not plead it as he would plead a pardon under the Great Seal, a former acquittal or conviction, or as he would plead to the jurisdiction. He gives it in evidence under the plea of Not Guilty. So that the very form of the proceedings implies, that, in order to entitle him to an acquittal, the prisoner must not only show that he is mad, but that he is *thereby* not guilty. In more technical language, his madness must be such as to enable him to traverse some one or more of the material averments of the indictment."

Madness may not, to speak with technical accuracy, be the "plea," as Mr. Justice Maule avers; but are not the jury guided in their decision as to the acquittal of the prisoner on the ground of insanity by the judge's exposition of the legal doctrine of insanity in relation to crime? Does he not instruct the jury that "partial insanity" will not acquit the prisoner? That the existence of a delusion, partial in its character, will not exonerate him from responsibility? That if the prisoner was labouring under the idea or delusion that he was "redressing a supposed grievance," and that under "the impression of obtaining some public or private benefit" he committed the crime, he is equally liable to punishment?

Surely these instructions, propositions, doctrines, or theories may, without an abuse of language, be also termed *tests* of insanity and responsibility, in relation to certain alleged morbid conditions of thought and conduct. The law has a certain preconceived standard of criminality. The mind of the alleged criminal must be in a condition to act voluntarily, of free will, and with malice. He must, to use the language of Foster, as quoted by Mr. Stephen, be capable of committing an action flowing from a wicked and corrupt motive; he must be in a condition to act *malo animo mala conscientia*.

"If a man," says Foster, "has either no motive at all, or no power of discerning what motives are wicked, and what are not—in more popular language, if he cannot discern good from evil, he cannot be said to act maliciously in the legal sense of the word; and if he can show, by reason of any disease, he is wholly unable to distinguish between good and evil, he has rebutted the presumption of malice."

Let us for a moment apply Dr. Johnson's definition of the word "test" to this lucid exposition of the principles of the criminal law, and how does it affect the question at issue?

A standard of criminal responsibility is erected; in other words, certain well-defined principles of criminal responsibility are enunciated. A culprit is indicted for murder; he pleads Not Guilty, on the ground that he was incapable of acting voluntarily, maliciously, and of free will, on account of his

mental infirmity destroying his power of distinguishing between good and evil, right and wrong. This condition of alleged and imputed disorder of mind is then reviewed by the Court, and its "genuineness" tested by "comparing" it with those mental states of admitted legal responsibility in which the criminal is capable of acting *malo animo mala conscientia*.

What are the doctrines of criminal responsibility in cases of alleged insanity, as propounded authoritatively in our courts of law? I will not refer in detail to the conflicting *criteria* of responsibility which have at different periods been laid down by the bench. (For the existence of such discrepancy of opinion was candidly admitted by Lord Campbell, in the House of Lords, when he said, "He had looked into all the cases that had occurred since Arnold's trial, in 1723, and to the direction of the judges in the case of Lord Ferrers, Bellingham, Oxford, Francis, and M'Naughton, and he must be allowed to say that there was a wide difference of opinion both in the *meaning* and in the *words* of their description of the law.") The principle of law as expounded in 1843, by the judges in the House of Lords, appears to me (without quoting the decision at length) to be embraced in the following propositions:—

1st. A person labouring under partial delusions only, and who is not in other respects insane, notwithstanding he commits a crime under the influence of the insane delusion that he is redressing or revenging some supposed grievance or injury, or producing some public benefit, is liable to punishment if he knew at the time of committing such crime that he was acting contrary to the law of the land.

2nd. To establish a defence on the ground of insanity, it must be clearly proved that at the time of the committing of the act the party accused was labouring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know he was doing what was wrong.

3rd. If a person under a partial delusion only, and not in other respects insane, commits an offence in consequence thereof he is to be considered in the same situation as to responsibility as if the facts in respect to which the delusion exists were real.

These rules of law in relation to offences committed in an alleged condition of insanity, suggest for consideration—

1st. The doctrine of partial delusions in their legal relation to crimes committed by persons in other respects insane, under an insane idea of redressing a real injury, or revenging some supposed grievance.

2nd. The legal doctrine of partial insanity.

3rd. The knowledge of right and wrong viewed as conclusive evidence of responsibility in cases of imputed insanity.

Before discussing the question of "partial insanity," I would premise that the rule of law by which persons are held legally responsible for actions committed whilst under the dominion of a delusion, provided the person imagined that he was redressing a *supposed* grievance, or under the impression of obtaining some public or private benefit, was propounded by Lord Erskine in his celebrated speech in defence of Hadfield. He there declared, "That when a madman commits a crime under the influence of an impression which is entirely visionary, and purely the hallucination of insanity, he is not the object of punishment; but that though he may have shown insanity in other things, he is liable to punishment if the impression under which he acted was true, and the human passion arising out of it was directed to its proper object." He illustrates this principle by contrasting the case of Hadfield with that of Lord Ferrers. Hadfield laboured under the delusion that the end of the world was at hand, and that on the death of the king, the Messiah would immediately appear on earth, and the reign of the Millennium begin.* Lord Ferrers, after showing various indications of insanity, murdered a man against whom he was known to harbour deep-rooted resentment on account of *real* transactions in which that individual had rendered himself obnoxious to him. The former, therefore, is considered as an example of the pure hallucination of insanity; the latter, as one of human passion founded on real events, and directed to its proper object. Hadfield was accordingly acquitted, but Lord Ferrers was convicted of murder, and executed.

It will be for us to discuss whether it is consistent with an enlightened jurisprudence, and a philosophic view of insanity, to consider that a man in an insane state of mind should be held amenable to the punishment of death, *because his delusion is to a degree based upon actual circumstances, and because there is in his conduct evidence of his having been under the influence of passion apparently rationally and sanely directed?*

In considering this section of our subject, it is essential that we should fully appreciate the fact, that it is one of the well-known characteristics of insanity for persons to labour under

* Although very insane, Hadfield exhibited great acuteness, coolness, and self-possession, common features in cases even of dangerous insanity. It is stated that when standing at the pit-door of the theatre, waiting for admission, the people around pressed and crowded inconveniently upon him, when a young woman, putting her hand on his shoulder, said, "Sir, you are hurting me; the handle of your umbrella is running into my bosom." "I could not," he added, "help smiling at the time, for the handle of what she supposed my umbrella was the handle of my pistol, which I held concealed within my coat under my arm."

delusions connected with, and originating in, actual circumstances. This is one of the common features of insanity, the mental disorder exhibiting itself in a morbid and false view of the actual objects of sense, and a diseased and exaggerated estimate of the daily occurrences of life.

A man in a state of incipient or advanced insanity notices a person paying more than (he considers) the ordinary, legitimate and conventional attention to his wife. A case can easily be conceived in which a man may, in this respect, unintentionally slightly overstep the line of prudence and propriety. The fault is observed by the *quasi* suspicious madman, and made the subject of deep thought and meditation, until the mind, being up to this period only in an incipient condition of lunacy, yields to the morbid mental suggestion that his wife has been actually unfaithful, and that the man who has been seen in apparent familiar converse with her is her seducer. Thus may a delusion—a dangerous, an insane delusion—a delusion based upon a distorted, perverted, irrational, and insane view of *actual circumstances*, originate and impel the person to destroy human life. I will imagine a case like M'Naughton's. A person is under a delusion that he is the victim of a conspiracy. His insanity may be somewhat general in its development—his delusions not, in the first instance, attaching to any one particular individual, or, in legal phraseology, his insanity is not yet "partial" in its manifestation.

It is possible that a man in such a state of mind may have some trifling claim upon the Government for either insignificant services rendered to a Cabinet Minister, or on account of property sacrificed in defence of the Crown in one of our colonial possessions. He writes and demands compensation—extravagant compensation—for a questionable service rendered, and a still more doubtful injury sustained. He is told that his claims are all illusory. This disappointment preys upon his mind, until his bodily health becoming vitiated, and his mind palpably disordered, the idea of the wrong inflicted becomes a *fixed false, and delusive impression*, exercising a tyrannical and autocratic sway over his passions and conduct. His disordered fancy fixes upon one of the Government officials—it may be one of the clerks of the office with whose chief he has been in correspondence—and under the dominion of this phantom of his imagination, that he has a *bonâ fide* claim which will not be recognised, and rights which are unjustly ignored, he revenges himself by taking his life! Alter the circumstances, and it constitutes a type of case frequently coming under the observation of persons conversant with insanity. Many of the delusions of the insane may thus be traced to actual existing circumstances.

A merchant becomes to a degree affected in his pecuniary circumstances ; he has sustained a trifling loss of property. This disturbs his thoughts, interferes with his regular sleep, and eventually damages the general health. His mind ultimately succumbs to the brain disorder, and symptoms of unmistakeable insanity appear. He is under a delusion that he is reduced to a state of abject poverty, declares that he is not worth a farthing, and asserts that he and his family must go to the workhouse. It is useless to reason with a man so insane. A clear statement of his affairs is laid before him, he listens heedlessly to the representations of his kind relations and friends, and appears to examine his banker's book with care, but nothing dissipates the delusion ; there it remains a fixed, permanent impression of hallucination, until death puts a period to his unhappy life. This is a case of insanity springing out of actual circumstances ; the disease of the mind evidencing itself in a false, perverted, insane, and irrational estimate of events that have in reality taken place. In many of these cases the mind is in an incipient state of disorder before the occurrence of the shock, and the palpable demonstration of derangement which afterwards exhibits itself is only a continuation of a previously existing state of mental alienation ; but this does not in the slightest degree affect the principle for which I am contending,—that many commit offences against the law in an irresponsible state of insane mind, who are considered accountable agents and amenable to punishment, because they act under a delusion that they are redressing a supposed grievance ; and, having some slight justification for their impressions, proceed and conduct themselves as a man in sane and healthy possession of his reason would under similar circumstances. The law assumes that persons in an irresponsible state of insanity do not redress injuries like sane men ; that they are oblivious to all feelings of revenge and resentment ; that they are incapable of feeling the

“ Whips and scorns of time,

The oppressor's wrong—the proud man's contumely.”

So much for the rule of law laid down for the guidance of those into whose hands are entrusted the administration of justice—viz., that “ notwithstanding the party (the insane party) committed a wrong act while labouring under the idea (delusion, I presume) that he was redressing a supposed grievance or injury (a fanciful and imaginary grievance and injury), or under the impression (hallucination) of obtaining some public or private benefit, he is liable to punishment.” I maintain that this is an erroneous doctrine of responsibility in cases of alleged insanity, and an unsafe principle of law ; because it is based

upon false views of the true characteristics and phenomena of mental alienation. I am not now addressing myself to the consideration of incipient forms of disturbed mind, to *pseudo* states or phases of insanity, or to certain abnormal deviation from mental health, not amounting to derangement of mind but to clearly, positively, and obviously developed insanity associated with palpable and appreciable delusions or hallucinations. With reference to the legal doctrine of right and wrong as applied to cases of alleged insanity, I suggest no metaphysical objection. I use the words in their admitted and recognized legal acceptation. The word *wrong*, as Mr. Stephen observes is "that which the *law* and not that which the *prisoner* considers wrong."

It is questionable whether the English language could produce two words so incapable of uniformity of construction as those of right and wrong when applied to criminal cases of insanity.

If the doctrine of right and wrong be admitted as a legal test, and acted upon as a principle of law, would it not (owing to the essential difference in the character of the cases of insanity to which it would be applied) be partial, restricted, and circumscribed in its operation? There are, undoubtedly, cases of insanity which come within the range of this test; but in many forms of mental disorder associated with an irresponsible condition of mind, the doctrine of right and wrong could not with justice or safety be relied upon.

If it be a fact that there are a large number of insane persons confined as lunatics, in whom this power of distinguishing between right and wrong, lawful and unlawful, good and evil, remains apparently intact, then, I ask, is it a safe standard of responsibility—a just principle of law?

I say advisedly, "apparently intact." A lunatic may have one or two prominent delusions, and in this state of disordered intellect retain the power of conversing coherently, rationally, and even with brilliancy, upon many subjects connected with science, literature, and the fine arts. He may even be competent to make a testamentary disposition of his property, and to transact ordinary matters of business with unusual shrewdness and a keen regard to self-interest; the fact of his brain being in a morbid state, in a condition of exalted function, may develop an amount of intelligence, acuteness, and sagacity he never exhibited previously to the attack of mental disorder. Hence the extreme cunning, cleverness, and design often exhibited by persons palpably insane. Men in a state of insanity become orators and poets, who previously to their illness were entirely ignorant of tropes, and innocent of ever having penned a stanza. But we must be careful not to confound such conditions of *morbid exal-*

of thought and intelligence with those complex operations of mind, involved in the consideration of the question of right and wrong, under circumstances the most painful and trying that occur to a human individual. In other words, I argue, that capacity to draw nice distinctions between right and wrong—power of correctly estimating the relation between a suggested line of action, and its penal consequences,—the ability to create in a healthy manner the moral and legal principles upon which the conduct of society, and the safety and protection of human life, are not to be confounded with an apparent sagacity of the intelligence so often witnessed in certain morbid conditions of the brain, disordering the operations of the mind.

We are not justified in inferring, because the alleged criminal exhibits more than the usual degree of cleverness, cunning, and sagacity, that therefore he is in a condition of intellect which will enable him to judge nicely and accurately (when impelled, in an insane state of mind, to commit an act of violence upon a fellow-creature who has subjected him to a slight provocation) the questions—Am I right? what is right? what is lawful? what is good? am I about to disobey human and Divine laws?

Mr. Ray has placed this question in a clear and forcible light:—

The first result, therefore, to which the doctrine leads, is, that no man can ever successfully plead insanity in defence of crime, because it is said of no one, who would have occasion for such a defence, that he is unable in any case to distinguish right from wrong. To show all the merits of the question, however, it is necessary to examine particularly how far this moral sentiment is affected by, and what it bears to, insanity. By that partial possession of the reason, which has been spoken of as enjoyed by maniacs generally, it must not be implied the undiminished power of the mind to connect some objects or ideas in their customary relations, among which are those pertaining to their right or wrong, their good or evil, duty; and it must comprise the whole of these relations, else the individual is not sane on these points. A person may regard his child as the feelings natural to the paternal bosom, at the very moment when he believes himself commanded by a voice from heaven to sacrifice this child in order to secure its eternal happiness, than which, of course, he cannot accomplish a greater good. The conviction of a maniac's madness of mind, on certain subjects, is based in part on the moral point in which he views those subjects; for it would be folly to consider a person rational in reference to his parents and children, while he labours under an idea that it would be doing God's service to kill them,—though he may talk rationally of their characters, dispositions, habits of life, their chances of success in their occupations, their circumstances, and of the feelings of affection which he has always cherished towards them.

Before, therefore, an individual can be accounted sane on a par-

ticular subject, it must appear that he regards it correctly, in all its relations to right and wrong. The slightest acquaintance with the insane will convince any one of the truth of this position. In no school of logic, in no assembly of the just, can we listen to closer and shrewder argumentation, to warmer exhortations to duty, to more glowing descriptions of the beauty of virtue, or more indignant denunciations of evil-doing, than in the hospitals and asylums for the insane. And yet many of these very people make no secret of entertaining notions utterly subversive of all moral propriety; and, perhaps, are only waiting a favourable opportunity to execute some project of wild and cruel violence. The purest minds cannot express greater horror and loathing of various crimes than madmen often do, and from precisely the same causes. Their abstract conceptions of crime, not being perverted by the influence of disease, present its hideous outlines as strongly defined as they ever were in the healthiest condition; and the disapprobation they express at the sight arises from sincere and honest convictions. The particular criminal act, however, becomes divorced in their mind from its relations to crime in the abstract; and, being regarded only in connexion with some favourite object which it may help to obtain, and which they see no reason to refrain from pursuing, is viewed, in fact, as of a highly laudable and meritorious nature. Herein, then, consists their insanity; not in preferring vice to virtue, in applauding crime and ridiculing justice, but in being unable to discern the essential identity of nature between a particular crime and all other crimes whereby they are led to approve what in general terms they have already condemned."

Mr. Stephen, although he argues in favour of this doctrine of criminal responsibility, appears to consider that the question might with safety be modified. As suggested by this gentleman the case would be thus put to the jury:—"Was the prisoner prevented by mental disease from appreciating the reasons for which the law has forbidden the crime of which he is accused or from applying them to his own case?" I would add to these questions these words:—and was he able to exercise a healthy volition in the matter?—had his mental disease destroyed his powers of free-will *quoad* the crime of which he stands accused. A paralytic may know that, under certain conditions of danger the only safety is in flight. He is conscious of the fact, but his motor power is gone. It is so with many lunatics; they know what is right, and bitterly lament their sad loss of volitional power, as well as their incapacity to act in obedience to their notions of what is right and just. This will be more apparent when I address myself to the consideration of the subject of Homicidal Insanity.

I proceed next in order to the question of Partial Insanity. Lord Hale says:—

"There is a partial insanity and a total insanity of mind. The

er is either in respect of things *quoad hoc vel illud insanire*; some ones that have a competent use of reason in respect of some subjects yet under a particular *dementia* in respect of some particular diseases, subjects, or applications; or else it is partial in respect of sees; and this is the condition of very many, especially melancholy ones, who for the most part discover their defect in excessive fears, griefs, and yet are not wholly destitute of reason; and this partiality seems not to excuse them in the committing of any offence in matter capital; for, doubtless, most persons that are felons of selves, and others, are under a degree of partial insanity when they commit these offences. It is very difficult to define the invisible that divides perfect and partial insanity; but it must rest upon instances duly to be weighed and considered both by judge and jury; lest on the one side there be a kind of inhumanity towards the state of human nature; or on the other side, too great an indulgence in great crimes."

and the same learned judge adds, "that the best measure is—such a person as is labouring under melancholy distempers yet ordinarily as great understanding as ordinarily a child of seven years hath, is such a person as may be guilty of treason felony?"*

The term partial insanity," says Collinson, "imports that a person is insane on one or more particular subjects only, and not in other respects." Lord Lyndhurst, who takes a more restricted view of the subject of partial insanity, thus defines it.—He says, "the mind is not unsound on one point only and not in all other respects, but this unsoundness manifests itself principally with reference to some particular object or person." But other authorities use the term in a restricted sense, synonymously with that type of mental disease called "monomania," or delusion upon one prominent topic or directed to one particular person, the mind being sound on all other objects. Accepting this as the legal signification of the term, it asks—Is there a condition of mind which can be correctly designated as partial insanity or monomania?

Considering the matter metaphysically, I would observe, that we cannot disentangle and separate the intellectual faculties as we can the threads of a skein of silk, and say this faculty of the intellect operates by itself, and that faculty is independent of the other faculties of the intellect, and another state of the mind is isolated from all other conditions of mental manifestation. This is contrary to the first and elementary principles of the science of mental philosophy.

As William Hamilton remarks:—

It should ever be remembered that the various mental faculties

* Hale's P.C. 30.

are only possible in and through each other; and our psychological analyses do not suppose any real distinction of the operations which we discriminate by different names. Thought and volition can more be exerted apart than the sides and angles of a square can be separately from each other."

Whatever classification of the faculties of the mind the metaphysical philosopher may adopt, whether it be the general division of the mind made by the ancients into the powers of the understanding, and the powers of the will, these faculties were never presumed to be so many distinct and separate entities capable of acting independently of each other; but they have always been regarded as links of the same chain, elements of the same intellectual system. The idea of disease being restricted to one faculty of the mind, and uninfluencing other powers of the intellect, is opposed to the metaphysical theory of the unity of the consciousness. If I may quote Holy Scripture in illustration of this subject, I would refer to a portion of the 12th chapter of the 1st Book of Corinthians, in which, speaking of the indivisibility of the body, and unity of physical operation, the great principle is lucidly enunciated:—"If the foot shall say, Because I am not the hand, I am not of the body; is it therefore not of the body? And if the ear shall say, Because I am not the eye, I am not of the body; is it therefore not of the body? If the whole body were an eye, where were the hearing? If the whole were hearing, where were the smelling? But hath God set the members every one of them in the body, as he hath pleased him. And if they were all one member, where were the body? But now are they many members, yet but one body. And the eye cannot say unto the hand, I have no need of thee; nor again the head to the feet, I have no need of you. And whether one member suffer, all the members suffer with it; or one member be honoured, all the members rejoice with it."

Apply this principle to the operations of the mind, and enquire whether the memory can say to the attention, I have connexion with you; whether the reflective powers can say to the judgment and reason, I am independent of your operation; whether the will can stand aloof from the imagination; and, to speak more generally, whether the faculties can exist apart from the passive powers of the mind; whether the moral faculties can exercise an independent sovereignty and dominion without influencing and calling into action the intellectual portion of man's complex organization?

Is there not a mysterious, inscrutable, and inexplicable mystery in the constitution of the human mind, defying all atten-

at an accurate and minute classification and separation of its powers? If such a state of mutual dependence, action, and union obtains between various states of mind (I will not use the arbitrary terms "faculty" or "power") in a condition of health, *a fortiori* how impossible is it to disjoint, separate, and individualize the mental faculties when under the influence of disease? Can we draw the line of demarcation between a diseased and healthy condition of the delicate structure of the vesicular neurine of the brain? Is it not obviously impossible for the most experienced anatomist to say, This is the territory which separates the morbid from the healthy portion of the brain? or for the physician to assert such an extent of disorder of the mind is consistent with safety and responsibility, but beyond the boundary, danger and irresponsibility commence?

When speaking of partial insanity, as an accepted legal phase and type of mental derangement, Lord Brougham remarks:—

"We must keep always in view that which the inaccuracy of ordinary language inclines us to forget, that the mind is one and indivisible; that when we speak of its different powers or faculties—as memory, imagination, consciousness—we speak metaphorically, likening the mind to the body, as if it had members or compartments; whereas, in all accuracy of speech, we mean to speak of the mind acting variously—that is, remembering, fancying, reflecting; the same mind, in all these operations, being the agent. We therefore cannot, in any correctness of language, speak of general or partial insanity; but we may, most accurately, speak of the mind exerting itself in consciousness without cloud or imperfection, but being morbid when it fancies: and so its owner may have a diseased imagination; or the imagination may not be diseased, and yet the memory may be impaired, and the owner be said to have lost his memory. In these cases, we do not mean that the mind has one faculty—as consciousness—sound, while another—as memory or imagination—is diseased; but that the mind is sound when reflecting on its own operations, and diseased when exercising the combination termed imagining, or casting the retrospect called recollection. This view of the subject, though apparently simple, and almost too unquestionable to require, or even justify, a formal statement, is of considerable importance when we come to examine cases of what are called, incorrectly, partial insanity, which would be better described by the phrase 'insanity' or 'unsoundness,' always existing, though only occasionally manifest."

But, apart altogether from the metaphysical objection to the theory, let us for a moment consider whether such a form of disease as partial insanity or monomania comes under the observation of the practical physician. There are, undoubtedly, forms of insanity in which there is an unhealthy *predominance* and *exaltation* given to particular mental *impressions* or *delusions*;

that certain states of morbid thought and feeling stand out bold and prominent relief, giving, as it were, a character type to the mental disease; but *I never yet saw a case of alienation of mind in which the delusion or hallucination was in reality confined to one or two ideas, those ideas exercising no influence over the conduct of the person, and not implicating to a certain degree, the other faculties of the mind.* It is impossible to circumscribe the operation of morbid condition of thought, or to draw a line of demarcation between the states of mind that are clearly under the influence of disease and those operations or faculties of the intellect that remain apparently unaffected. A man believes himself to be a Saviour, or Mahomet the prophet. Apparently the man's mind is sound upon all other points; but within what limit can we confine and restrain the influence of so serious a delusion?

A slight accession of bodily disease, a severe attack of indigestion, congestion of the liver, or a torpid state of the bowels may make all the difference between security and safety in such a case. A person labouring under the dominion of one palpable insane delusion or hallucination (I am now using the term delusion in its strictly medical acceptation), ought not to be treated *quoad* the question of criminality as a sane and rational man. But let me for a minute revert to the question as to the existence of partial insanity, or monomania. Foville, a French physician of great celebrity, who had for many years the medical charge of the Charenton Lunatic Asylum near Paris, when speaking of monomania, observes:—

“Monomania consists in a delirium, partial and circumscribed to a small number of objects. Monomania, in its most simple condition, is excessively rare: the number of patients who only rave on one subject is *infinitely small* compared to the number of those who are called monomaniacs. Under this head are often confounded all those who have some habitual dominant idea. I have only seen two cases which rigorously merit the name, and these two even were affected from time to time with more extended delirium.”

He again remarks:—

“Let any one examine the hospitals of Paris, of Bicêtre, of Charenton, and he will see that, amongst the thousands of insane, there scarcely one true monomaniac, *perhaps not one.* Insanity attacks principally, at one time the intellectual, at another the moral and affective faculties; and, again, the sensations and movements. Each of these may be more or less affected than the others; and so, while the intellect, *without being unaffected*, is less deeply involved than the other faculties, we fall into the error of considering it sound, and calling these monomaniacs. Indeed, it seems to me as though the descriptive

of monomania had been written *upon the word*, and not from nature; that is to say, that writers have described what *might* merit the title of monomania, but of which they can find no instance in practice."

Moreau, also a great authority in France, says:—

"It is impossible to admit that the intellectual faculties can be modified in a partial manner. In the slightest as well as the most severe forms of insanity, there is necessarily a complete metamorphosis—a radical and absolute transformation of all the mental powers of the *ONE*. In other words, we are insane or we are not insane; we cannot be half deranged or three-quarters, full face or profile."

Baillarger, an eminent French psychological physician, adopts the same view of the question, and maintains that the alleged monomaniacal idea is more frequently *predominant* than *exclusive*. If we look to Germany, we find the first psychological authority of that country, Damerow, declaring that "he never knew a case of the disease of the mind called monomania, in which there was not a fundamental, general psychical disorder."

When addressing himself to the subject of monomania, Mr. Stephen remarks, that "monomaniacs are capable of acting quite rationally upon a variety of subjects except those which they connect with their delusions." Apparently, such is the fact. If a person be under a delusion—an insane delusion—that he is a pauper, he having at the time large landed possessions, as well as a considerable balance at his banker's; if that be his hallucination, how can it be safely predicated that all his thoughts and feeling may not be materially tinged and influenced by his morbid state of mind? He may be able to solve a problem in mathematics—he may have the power of writing a consistent letter on business to his solicitor—and on some subjects, involving an exercise of the intellectual faculties, his mind may appear sound; but on matters which are likely to call into play his passions, feelings, and affections, or to tax severely the emotions, his power of acting sanely and responsibly may be altogether destroyed. I maintain that it is not right to place a man whose mind is palpably deranged, even although to a partial extent (adopting the legal term), in the same class with sane persons, and expect him, under circumstances of great irritation and provocation, to act as the law would require him to act if he were in possession of a sane mind, and a healthy control over his passions.

A man was tried many years back for murdering a stranger whom he accidentally met in a country lane, because he refused, when asked, to give him twopence (that being the sum of money he begged for, at a time when he was proved to be suffering acutely from the pangs of hunger). This man was found guilty

and executed. I was at the time much interested in his case, for the evidence of his state of mental disorder (previously to the commission of the murder) was, to my mind, strong and conclusive. It occurred to me that his conduct was quite inconsistent with the hypothesis of sanity—that no man in possession of his reason would have been driven to so horrible an extremity by a trifling provocation. I, with others, ineffectually interceded with the Secretary of State in his behalf, and endeavoured to save him from the gallows.

As a principle, it may be laid down that a man in a sane state of mind is in a condition to weigh the legal consequences of suggested criminal line of conduct; there is generally a healthy correspondence between the offence and the action springing out of it.

Before I proceed to the consideration of Homicidal Monomania, and to those morbid states of alleged criminal irresponsibility connected with what are termed blind and irresistible impulses, I would premise that I have always taken exception to these phrases; I think they are unfortunate and unhappy nomenclological designations of admitted and accepted states of mental disorder associated with a desire to destroy life.

The terms "homicidal monomania," "blind and irresistible impulse," are, I admit, open to grave objections, and to serious abuse. Of the existence of a type of insanity without delirium or apparent delusion, suddenly manifesting itself, and impelling its miserable victims to destroy those nearest and dearest to them, there cannot be a question. There are other cases (and such will be found in most lunatic asylums) in which the mind of the patient appears to be absorbed with one horrible homicidal idea, that being the predominant and characteristic symptom of the mental alienation. A case is recorded in a French journal of a man whose state of mind was made the subject of judicial investigation in France, who for twenty-six years was haunted by an intense desire to destroy human life. He freely confessed that his mind had for this long period been absorbed in this one idea.

The Report of the official authorities declared that this man appeared in other respects of sound mind. I subjoin the official account of this remarkable case:—

"I, the undersigned, William Calmeilles, health officer, residing in the principal town of the Canton of Cazals (Lot), certify to all whom it may concern, that, upon the requisition of the mayor of the commune of Marminiat, I have this day been to the village of Brunet, the aforesaid commune of Marminiat, to decide upon the mental condition of a person named John Glenadel, a husbandman, dwelling in the said village of Brunet.

"I found Glenadel sitting upon his bed, having a cord around his neck, fastened by the other end to the head of the bed; his arms were also tied together at the wrist with another cord. In giving my Report, I do not believe that it can be better made than by recording the conversation which took place between Glenadel and myself, in the presence of his brother and sister-in-law.

"*Question.* Are you unwell?

"*Answer.* I am very well; my health is excellent.

"*Q.* What is your name?

"*A.* John Glenadel.

"*Q.* What is your age?

"*A.* I am forty-three; I was born in '96; see if this is not correct.

"*Q.* Is it by compulsion or by your own consent that you are bound in this manner?

"*A.* It is not only by my consent, but I demanded that it should be done.

"*Q.* Why is this?

"*A.* To restrain me from committing a crime of which I have the greatest horror, and which, in spite of myself, I am constantly impelled to execute.

"*Q.* What is this crime?

"*A.* I have one thought which constantly torments me, and which I cannot conquer—that I must kill my sister-in-law; and I should do it were I not restrained.

"*Q.* How long have you had this idea?

"*A.* About six or seven years.

"*Q.* Have you any cause of complaint against your sister-in-law?

"*A.* Not the least, monsieur; it is only this one unfortunate idea which troubles me, and I feel that I must put it in execution.

"*Q.* Have you ever thought of killing any one besides your sister-in-law?

"*A.* I at first thought of killing my mother; this thought seized me when I was fifteen or sixteen years old, at the age of puberty, in 1812, as I well recollect. Since that time I have not passed one happy hour; I have been the most miserable of men.

"*Q.* Did you conquer this unfortunate idea?

"*A.* In 1822, I could no longer resist, I being at that time twenty-five or six years of age; and to remove this unfortunate inclination, I joined the army in the capacity of a substitute. I was two years in Spain with my regiment, and then returned to France, but this fixed idea followed me everywhere; more than once I was tempted to desert, to go and kill my mother. In 1826 they gave me an unlimited furlough, although it was unsolicited by me, and I returned to my father's house, my fatal idea returning with me. I passed four years with my mother, always having an almost irresistible inclination to kill her.

"*Q.* What did you do then?

"*A.* Then, monsieur, seeing that I should inevitably commit a crime which terrified me and filled me with horror, I, in 1830, rejoined the army, that I might not succumb to this temptation. I left for the second time my father's house, but my fixed idea again followed

me, and at last I almost decided to desert, that I might go and my mother.

"Q. Did you have any cause of complaint against your mother?

"A. No, monsieur, I loved her very much; thus, before starting said to myself, 'Shall I kill that mother who has exercised so much care over me during my infancy, and who has loved me so much although I have entertained this fatal thought against her? I will not do it; but I must kill some one.' It was then that the thought of killing my sister-in-law first occurred to me; I have a distinct recollection of this, I being at that time in Dax, and it was in the year 1832. It was then announced to me that my sister-in-law was dead, which was a mistake, it being another relative who had died. I then accepted of the furlough they had offered me, which I should by means have done had I known that my sister-in-law was still living. When I reached my home, and was informed that she was not dead, I experienced such a sinking and depression of spirits that I became quite sick, and my idea resumed its course.

"Q. What instrument do you choose with which to kill your sister-in-law?

"Here Glenadel was much affected; his eyes were bathed in tears, and looking towards his sister-in-law, he replied—'That instrument which would inflict the least pain! But however that may be, the time approaches, I perceive, when she must die, and this is as certain as that God lives.'

"Q. Do you not dread to inflict so much misery and anguish upon your brother and your little nephews?

"A. The thought of this has troubled me somewhat, but I should receive the punishment due to my crime, and should neither see nor know anything of their affliction; the world would rid itself of a monster such as me, and I should cease to live. I should not expect after this to see a single hour of happiness.

"It here occurred to me that M. Grandsault, of Salviat, my companion and friend, who is at present in Paris, had told me, about a year before, of a young man who, some years previously, had come accompanied by his mother, to consult him as to his own case, who presented many features very similar to those exhibited by Glenadel. As these cases are so very uncommon, I thought that, perhaps, the person and Glenadel might prove to be the same. I therefore asked him if it was he who had consulted my friend, and he replied in the affirmative.

"Q. What did M. Grandsault counsel you?

"A. He gave me most valuable advice, and he also bled me.

"Q. Did you experience any benefit from this bleeding?

"A. Not the least; my unfortunate idea pursued me with the same force.

"Q. I am about to make a Report upon your mental condition, from which will be decided whether you shall be placed in an hospital where you may recover from your insanity.

"A. My recovery is impossible; but make your Report as quick as possible—time presses. I can control myself but a little longer.

"Q. It must be that your parents have instilled into your mind correct moral principles, that they have set before you good examples, and that you yourself have possessed a virtuous mind, to have resisted so long a time this terrible temptation. Here Glenadel was again much affected; he shed tears, and replied, 'You are correct in this, monsieur; but this resistance is more painful than death. I know that I can resist but little longer, and I shall kill my sister-in-law unless I am restrained, as sure as there is a God.'

"Glenadel,' said I to him, 'before leaving you, let me ask of you one favour: resist still some days longer, and you shall not see your sister-in-law for a long time, as we will so arrange matters that you can leave here, since you so much desire it.'

"Monsieur, I thank you, and I will make arrangement to comply with your recommendation.'

"I left the house, and as I was about to mount my horse, Glenadel called me back, and when I had approached near to him, he said to me, 'Tell these gentlemen that I beseech them to put me in some place from whence it will be impossible for me to escape, for I should make attempts to do so; and were I to succeed in getting away, my sister-in-law would have to die, for I could not avoid killing her; tell these gentlemen that it is my own self who has said this to you.' I assured him that I would do this; but as I saw that he was in a state of great excitement, I asked him if the cord which bound his arms was strong enough, and if he did not think that by a strong effort he could break it. He made an attempt, and then said, 'I fear that I might.' 'But if I should procure for you something that would confine your arms still more securely, would you accept of it?' 'With thanks, monsieur.' 'Then I will ask the commander of the *gendarmes* to give me that with which he is accustomed to confine the arms of prisoners, and I will send it to you.' 'You will confer upon me a great favour.'

'I purposed to make many visits to Glenadel, so as to entirely satisfy myself as to his mental condition; but after the long and painful conversation which I held with him, after what my friend M. Grandsault had told me, after what has been said to me by the brother and sister-in-law of Glenadel, who are so much afflicted at the sad condition of their unfortunate brother, I became well convinced, without farther observation, that John Glenadel was affected with that form of insanity called monomania, characterized in his case by an irresistible inclination to murder—the monomania with which Papavoine and others, fortunately but a small number, were affected.

"Signed at Brunet, in the commune of Marminiat.

"May 21, 1839."

"CALMEILLES, *Health Officer*.

Catherine Zeigler was tried at Vienna for the murder of her bastard child. She confessed the act, and said she could not possibly help it; she was forced to do it; she could not resist the desire to commit the murder. The frankness of this her confession, connected with her good character, induced the tribunal to pass a merciful sentence; and on the ground of insanity (which

she did not herself plead), she was acquitted, and at length released from prison. But she told the Court, that if they let her escape, they would be responsible for the next murder she committed, for that if ever she had a child again she would certainly kill it. And so, in fact, she did. About ten months after her release from prison, she was delivered of a child, which she soon murdered.

Brought again to her trial, she repeated her old story, and added that she became pregnant merely for the sake of having a child to kill. She was executed for this second murder.

A female was admitted a few years back into the Royal Edinburgh Lunatic Asylum; she had no appreciable disorder of the intellectual powers; she laboured under no delusions. She had a simple abstract desire to kill, or rather, for it took a specific form, to strangle. She made repeated attempts to effect her purpose, attacking every person who came near her, even her own relatives. It appeared to be a matter of indifference to her whom she strangled, so that she succeeded in killing some one. She recovered, under strict discipline, so much self-control as to be permitted to work in the washing-house and laundry; but she still continued to assert that "she must do it;" that "she was certain she would do it some day;" that "she could not help it;" that "surely no one had ever suffered as she had done;" "was not hers an awful case?" And approaching any one, she would gently bring her hand near their throat, and say, mildly and persuasively, "I would just like to do it." She frequently expressed a wish that all the men and women in the world had only one neck, that she might strangle it. Yet this female had a kind and amiable disposition; was beloved by her fellow-patients; so much so, that one of them insisted on sleeping with her, although she herself declared that she was afraid she would not be able to resist the impulse to get up during the night and strangle her. She had been a very religious woman, exemplary in her conduct, very fond of attending prayer meetings and of visiting the sick, praying with them, and reading the Scriptures, or repeating to them the sermons she had heard. It was her second attack of insanity. During the former she had attempted suicide.

The disease was hereditary, and it may be believed that she was strongly predisposed to morbid impulses of this character, when it is stated that her sister and mother both committed suicide. There could be no doubt as to the sincerity of her morbid desires. She was brought to the institution under very severe restraint, and the parties who brought her were under great alarm upon the restraint being removed. After its removal she made repeated and very determined attacks upon the other patients, the attendants, and the officers of the asylum, and was

only brought to exercise sufficient self-control by a system of rigid discipline.

This female was perfectly aware that her impulses were wrong, and that if she had committed any act of violence under their influence, she would have been exposed to punishment. She deplored in piteous terms the horrible propensity.

A few years ago, a gentleman presented himself at a metropolitan lunatic asylum, and begged that he might be received as a patient. He stated that he had just left his solicitor, from whom he, in fact, brought a letter of introduction confirming his account of himself, and that it was necessary he should be placed under some form of restraint, for he had an irresistible desire to murder his wife or one of his children. He then added, that the preceding day he was walking in his garden, when he saw his wife and little girl approaching towards him. His eye at the same moment caught the sight of a hatchet lying on the gravel-walk, and he described that he had the greatest struggle within himself to escape out of the garden before he seized it to strike, perhaps fatally, one or other of them.

He loved his wife and child, he affirmed, dearly; but the homicidal idea haunted him continually, and he felt that he could not trust himself alone in their presence. It should be added, that the last night he slept at home, he did attempt in the middle of the night to strangle his wife, and would have succeeded had not her cries in the scuffle brought in timely assistance. In the midst of all this, during the explanation he gave of his case, he expressed himself well and rationally. His intellect appeared to be unclouded; and it turned out that he was at the same time in communication with his solicitor respecting some proceedings in the Court of Chancery, upon which he gave perfectly sane instructions. I will cite but one additional illustration of this type of insanity. The lunatic in question murdered his wife, and afterwards became a criminal inmate of the State Lunatic Asylum of Massachusetts. He gave the following account of his crime. On the morning of the murder the man was sitting with his wife. He was in a state of excitement; and in these circumstances the noise of the children always disturbed him. In order to render all quiet, the children were sent into a field to play or labour; he and his wife sat by the fire—he on one side, indulging in the gloomiest forebodings; she at work on the other side, doing all in her power to console and comfort him.

After a while she arose, went to the cupboard and poured some wine into a tumbler, brought it to him, and said, in the most cheerful manner, "Come, let us drink and forget our sorrow, and remember our poverty no more." She tasted the wine, and handed it to him, and he drank, and said, in reply, "*I wish it might kill*

me," or, "I might die." She took her seat again by the fire, and went to her work; he arose soon after, without any particular object or design, and walked into an adjoining room. In a moment, the idea of Samson and the weaver's beam rushed into his mind; he instantly seized a weapon which was before him, stepped behind his wife, and gave her the fatal blow. The man, during his confinement, often spoke of the amiable disposition of his wife; he declared that he had no fancied direction from higher powers, and that the thought of killing her never entered his mind until that impulse came upon him, and that it was as sudden as possible, and wholly irresistible. He also spoke of his having made many attempts to commit suicide.

When speaking of insane "irresistible impulses," Mr. Stephen remarks:—

"If the law is to rest satisfied with proof not of an *irresistible*, but merely of an *unresisted* impulse, it gives a sanction to all sorts of crime."

In many conditions of disordered brain and mind, the patient suffers acutely from these "resisted" impulses and morbid mental suggestions. This is one of the most distressing types of nervous and mind disorder coming within the range of the physician's observation and treatment. In many cases, the unhappy patient is fully and painfully conscious of his morbid condition of thought; and it occasionally happens, that so acute is the agony of mind consequent upon the struggle to conquer these suggestions, that relief is sought for in suicide. In this stage of consciousness the patient is occasionally able to appreciate that his sensations are perverted, his thoughts morbid, perceptions false, and his impulses wrongly directed.

Dr. Rush refers to the case of a lady, who prayed fervently that she might be relieved from the horror of her own morbid thoughts by a complete loss of reason!

This terrible consciousness of the approach of insanity, and of the actual existence of the malady, is one of the saddest features in this mysterious disease. The fact has not escaped the wonderful penetration of our great dramatic poet. When Gloucester is suffering from profound grief, consequent upon his recognition of Lear's insanity, he exclaims, in the bitterness of his wild despair:—

"The king is mad—how stiff is my vile sense,
That I stand up, and have ingenious feeling
Of my huge sorrows! *Better I were distract;*
So should my thoughts be severed from my griefs,
And woes by wrong imaginations lose
The knowledge of themselves."

"Such a state as mine," writes a patient, "you are probably unacquainted with, notwithstanding all your experience. I am not con-

scious of the suspension or decay of any of the powers of my mind. I am as well able as ever I was to attend to my business; my family suppose me in health, yet the horrors of a madhouse are staring me in the face. I am a martyr to a species of persecution from within, which is becoming intolerable. I am urged to say the most shocking things—blasphemous and obscene words are ever on the tip of my tongue. Hitherto, thank God! I have been enabled to resist; but I often think I must yield at last, and then I shall be disgraced for ever, and ruined. I solemnly assure you that I hear a voice which seems to be within me prompting me to utter what I would turn from with disgust if uttered by another. If I were not afraid that you would smile, I should say there is no way of accounting for these extraordinary articulate whisperings, but by supposing that an evil spirit has obtained possession of me for the time; my state is so wretched, that, compared with what I suffer, pain or sickness would appear but trifling evils.”*

All crime is alleged to spring from an unresisted and uncontrolled impulse; and a distinguished judge once declared from the bench, when reference was made to the subject of morbid irresistible impulses, that it was one of the objects of punishment to teach men, viciously and criminally disposed, the duty and necessity of restraining their wicked inclinations and impulses. No one doubts the correctness of this principle. But surely it is unphilosophic not to draw a right distinction between a *normal* and *healthy* disposition to crime, and those occasionally resisted and often unhappily irresistible tendencies to what the law considers wicked, vicious, criminal, and punishable acts, clearly connected with, and originating in, a *pathological* condition of the material instrument of thought disordering the mental operations. Was not this distinction entirely lost sight of when Lord Hale committed himself to the dogma that “all crime was partial insanity?” and did not a non-recognition of this great principle lead Dr. Haslam to declare that no mind was sound except that of the Deity? There are *insane* impulses, and *healthy* impulses, to crime and vice; and I think no person acquainted with the phenomena of diseased mind would confound one condition with the other.

A person may, with the object of obtaining some great pecuniary compensation, set fire to his house; another man, with no possible chance or hope of advantage or gain, does the same thing under the influence of an insane impulse. A mother murders her child, to destroy all evidence of her moral delinquency; another mother sacrifices the life of her offspring, to which she is tenderly attached, under the terrible dominion of

* “Essays on Partial Derangement of the Mind in Supposed Connection with Religion,” by the late John Cheyne, M.D., pp. 64-5.

a morbid desire to destroy.* A person in a drunken quarrel with his wife because she refuses to supply him intoxicating drink, and ends by destroying her life; a man, he may be a devoted, affectionate, and loving husband, without exhibiting any previous evidence of insanity, seized with an attack of homicidal frenzy, rushes upon her and cuts her throat! A man may enter a shop, and purloin an article of value; another person, moving in good society of high and unimpeachable integrity and above want, may, in a state of mental disorder, commit a similar offence, conscious of the time of the certainty of detection, disgrace, ruin, and punishment. One man practises his profession as a thief—it is his vocation; the other person commits a motiveless crime under the influence of a morbid, insane, and irresistible impulse. I readily admit that such cases require to be most jealously scrutinized. I do not, however, think there can be much practical difficulty in diagnosing and discriminating judiciously between the different classes of cases.

To revert, however, to the subject of resisted insane impulses. Patients often complain of being subject to this type of disorder, and feel the necessity for restraint and medical treatment. The suggestion to self-destruction and commission of homicide, without any other evidence of insanity in the patient's acceptance of the term, is a common symptom of disorder of the brain and nervous system. The patient, in describing his present state to his physician, says that the suggestion is "cut my throat,"—"poison—drown yourself,"—"cut your wife's throat,"—"murder your child,"—"poison him." Persons in this state of mind (notwithstanding the presence of great disturbance of the functions of the brain, and disorder of the general health) are often able to resist, for a period, these insane suggestions and impulses; but if they should yield to them, and the suggestion becomes an *irresistible* instead of a *resisted* one, what would Mr. Steadman's opinion be of their legal responsibility in relation to any crime they might commit?

A lady of strong devotional feelings, subject to great nervous disorder, could not repeat the Lord's Prayer without being impelled from within (as she described it) to say, "Our Father which art in HELL." She could not say "Heaven," although she tried to do so. This poor lady (whose mind was strongly imbued with religious sentiments) suffered great agony of mind in consequence of this horrible suggestion.

I was acquainted with a gentleman—a man of great accomplishments, of high order of intellect, of known literary re-

* An occasional occurrence in puerperal insanity.

tion, and of great personal worth—whose mind was for years tortured with morbid suggestions to utter obscene and blasphemous expressions. He eventually destroyed himself; and in a letter which he wrote to me a few days before committing suicide, and which did not reach me until after his death, he said his life was embittered and made wretched by these terrible suggestions; but he thanked God that he had never once yielded to them, and that, although he was a Christian in principle, he felt he was not sinning against God by committing self-destruction, with the object of effectually destroying all chance of his giving utterance to thoughts that might contaminate the minds and morals of others! This was a case of *resisted* suggestion, as far as the thoughts were concerned.

At the Norwich Assizes, in the summer of 1805, Thomas Callaby was tried for the murder of his grandchild. A witness found the prisoner sitting at the side of his bed, one morning in March, about four o'clock: he had dreadfully wounded his wife in different parts of her body. The prisoner's daughter brought down the child with its throat cut; the bloody knife was in the room, and he was charged with, and confessed his crimes, but said, "I do not care anything about it; my wife has heard me say a short time before that *I should certainly murder some one, and I begged to be confined.*" It further appeared in evidence, that he knew when his paroxysms were coming on; and on these occasions he had been known to tie himself down to the floor!

This affords a good illustration of a *resisted*, eventually becoming an *irresistible* impulse; but was not this wretched man as insane when he tied himself down to the floor, and requested his wife to place him in confinement, as when he yielded to the impulse and cut the throat of his grandchild?

Time will not admit of my considering the last division of my subject—namely, those mixed cases of passion, crime, and insanity, associated with a certain diseased temperament and hereditary tendency to mental disease, which, to my mind, clearly justify the merciful consideration of the Court, and some modification of punishment. Take for illustration the case of Lord Ferrers. The crime in this case is said to have been the result of deep-seated revenge. But what was his proved state of mind antecedent to the murder? It was established at his trial that he had long been the subject of *unfounded suspicions of plots and conspiracies, ravings, sudden attacks of fury, denunciations of unprovoked revenge, frantic and insane gesticulations*; that he was in the habit of standing before a glass, spitting and shaking his fist at his reflected image. Lunacy was hereditary in the family, and affected several of his relations. *A solicitor of repu-*

tation renounced his business on the full persuasion of his disordered in his brain. And long before the murder steward, his nearest relations had deliberated on the expediency of taking out a commission of lunacy against him. Previous to his separation from Lady Ferrers, his violence of disposition was so conspicuous, that one of the peers declared from his seat in the House of Lords that he looked upon him as a man who that if some effectual step was not taken to divest him of his power of doing mischief, he did not doubt but that they would have occasion to try him for murder. After he shot Mr. Johnson, Lord Ferrers appeared to be conscious of his crime, and manifested symptoms of pity; but when the surgeon had dressed the wound, the Earl declared to Mr. Johnson's daughter, as well as to the surgeon, that he intended to kill him, and did not repent of what he had done, for Johnson was a villain who deserved to die. He then drank to intoxication, when his hatred became more violent, that he said "he would not allow the wounded man to be removed to his own house; that he would keep him near him in order to plague the villain." He then retired to his chamber, where he abused and insulted Mr. Johnson, and threatened to strike through the head, and was with difficulty restrained from violence. Even at the moment of death, Lord Ferrers gave evidence of a questionable state of mind. It is recorded that he proceeded to Tyburn in his own carriage drawn by six horses, dressed gaily for the occasion in a light-coloured suit of embroidered with silver; and addressing himself to the witnesses who appeared struck at his singular costume, Lord Ferrers remarked, "You may perhaps think it strange to see me in this dress; but I have my particular reasons for it." Although he appeared pleased at being hanged like a common felon, he behaved with propriety and composure, and took an opportunity of declaring that he had no malice against Mr. Johnson, and that the murder was committed in a perturbation of mind, occasioned by various crosses and vexations, but stoutly disclaimed being insane, having had recourse to this plea solely to satisfy his curiosity. Was not this a case of doubtful sanity, and one of moral responsibility? And would not the claims of justice have been satisfied if Lord Ferrers had been subjected to the punishment the law could inflict short of actual death upon the scaffold?

Analogous cases are occasionally recognised in our common law, and are acquitted of the capital offence, even when marked symptoms of mental aberration are proved to have existed.

Mallandine was tried on the charge of attempting to murder her son. She was an unmarried woman, twenty-eight years of age.

age; the child was a boy of six or seven. She was seen to throw him into the Regent's Canal at Haggerstone; and she would have plunged in herself, but a passenger came up and prevented her. The boy was rescued, and she was detained. She then proved to be in a state of wild excitement, brought on by distress. Her counsel, Mr. Cooper, suggested to the jury that the evidence disclosed such a state of mind as did not amount to actual insanity, but prevented her from being aware of the effect of what she was doing. On that argument, apparently, the jury pronounced a verdict of acquittal.

Some years back, a man named Harrison was tried for murder in Scotland, respecting whom the following facts were established:—"He had a wish to join the sect of Quakers, and attended the meetings of that persuasion for some months, where he paid no attention to the worship, but muttered to himself, smelt his Bible, and pricked himself with pins or needles until he lost a considerable quantity of blood. On one occasion he demanded instant admission to the society. He went more than once to the meeting-house early in the morning, and was seen to kneel, and heard to invoke the Virgin Mary, while he wounded himself over with both hands, and smeared the doors with his blood. He habitually wounded his hands, wrists, and arms with needles or pins. He was in the habit of sucking the blood from his own wrists after every two or three mouthfuls of food." Many attempts were made to convince the authorities that these were not the manifestations of a perfectly healthy mind; but they were disregarded, and the poor wretch underwent the penalty of the law.

Much discussion arose at the time of Weston's acquittal for the murder of Mr. Waugh, in Bedford-row. It was questioned whether the verdict of Not Guilty "on the ground of his predisposition to insanity" met the justice of the case. His life was, however, saved. Some months after his trial, his insanity became so well marked that the authorities of Newgate obtained an order from the Secretary of State for his removal to Bethlehem, where I saw and conversed with him in an unmistakable condition of insanity.

When speaking of these modified cases of responsibility, Alison remarks:—

"Cases frequently occur in the highest degree perplexing both to the court and jury, which can only be justly resolved by an application of the principle and mode of proceeding above set forth. They are those in which the accused was to a great degree to blame, but would not probably have committed the fatal act but for some constitutional or supervening derangement which rendered him not *so far responsible* as those who, by enjoying their reason unclouded, had no defence

whatever against atrocious actions. In such cases there is a *of guilt and misfortune*; for the former, he should be severely punished; for the latter, the extreme penalty of the law should be remitted.

Has sufficient allowance been made, in the legal consideration of the question of crime committed under the influence of delusion, or irresistible impulse, for a mind prostrated, and overpowered, and crushed by a vast and gloomy delusive damming up the channels of thought, and destroying all faculty of action?

"I had a species of doubt," says a recovered maniac, describing what his feelings were during his attack; "but no one who has not been deranged can understand how dreadfully true and terrible a lunatic's insane imaginations appear to him—how slight and trifling his insane doubts."

I may be asked what principle I would propound for the guidance of courts of law in these cases. I cannot but repeat what I have already declared to be my conviction, that in *every criminal case where the question of responsibility arises* the proper course of judicial inquiry, IF IT BE POSSIBLE TO ESTABLISH ANY DEGREE OF POSITIVE INSANITY, IT SHOULD ALWAYS BE VIEWED AS A VALID PLEA FOR A CONSIDERABLE MITIGATION OF PUNISHMENT, AND AS PRIMA FACIE EVIDENCE IN FAVOR OF THE PRISONER; AND IN NO CASE WHERE INSANITY CLEARLY EXISTS (WITHOUT REGARD TO ITS NATURAL OR MORAL AMOUNT) OUGHT THE EXTREME PENALTY OF THE LAW TO BE INFLICTED.

What, I may be asked, is my test of insanity? I have known of no unerring, infallible, and safe rule or standard applicable to all cases. The only logical and philosophical mode of procedure in doubtful cases of mental alienation, is to compare the mind of the lunatic at the period of his suspected insanity with its prior natural and healthy condition: in other words, to consider the intellect in relation to itself, and to no artificial *priori* test. Each individual case must be viewed in its own relations. It is clear that such is the opinion of the judges, notwithstanding they maintained as a test of responsibility a rigid ledge of right and wrong. Can any other conclusion be drawn from the language used by the judges when propounding the House of Lords their view of insanity in connexion with the facts? "The facts," they say, "of each particular case must of necessity present themselves with *endless variety and with every difference in each case*; and as it is their duty to declare the law upon each particular case, upon facts proved before them, and after hearing arguments of counsel thereon, they deem it *once impracticable, and at the same time dangerous to the administration of justice, if it were practicable, to attempt to*

minute applications of the principles involved in the answers given by them to the questions proposed." This is a safe, judicious, and philosophic mode of investigating these painful cases; and if strictly adhered to, the ends of justice would be secured, and the requirements of science satisfied.

In considering the question of modified responsibility in connexion with these cases of alleged insanity, we should never lose sight of the fact, that, even if a lunatic be fully exonerated and acquitted in consequence of his state of mind, he is doomed to linger out the remainder of his miserable existence in the criminal wards of a public lunatic asylum.

To talk of a person escaping the extreme penalty of the law on the plea of insanity, as one being subjected to no kind or degree of *punishment*, is a perfect mockery of truth and perversion of language. Suffer no punishment! He is exposed to the severest pain and torture of body and mind that can be inflicted upon a human creature short of being publicly strangled upon the gallows. If the fact be doubted, let a visit be paid to that dreadful *den* at Bethlehem Hospital—

*"Regions of sorrow, doleful shades, where peace
And rest can never dwell, hope never come,
That comes to all"—*

where the criminal portion of the establishment are confined like wild beasts in an iron cage!

Much has been said of the deterring effects of capital punishment. I do not doubt its having some effect in preventing crime; but I incline to the opinion, that, if the real condition of those confined as criminal lunatics was well understood (assuming the insane to be amenable to the fear of punishment), it would act more potently as a deterring agent than any apprehension they might feel at the prospect of a public execution.

It was the opinion of Beccaria that the impression made by any punishment was in proportion to its *duration*, and not to its *intensity*. "Our sensibility," he observes, "is more readily and permanently affected by slight but reiterated attacks than by a violent but transient affection. For this reason, the putting an offender to death forms a less effectual check to the commission of crimes than the spectacle of a man kept in a state of confinement, and employed in hard labour to make some reparation, by his exertions, for the injury he has inflicted on society."

In judicially estimating cases of crime connected with alleged conditions of insanity, it is our duty always to bear in mind, that, if an error be committed on the side of undue severity, it never can be remedied.

No reparation can be made for so great an injury—for so serious an act of injustice. If a criminal should be unjustly acquitted on the plea of insanity (and I admit such cases have occurred), a degree of injury is undoubtedly done to society, and the confidence in the equitable administration of justice is, to an extent, shaken. But can a judicial mistake like this for one moment be compared with the serious and fatal error of consigning an irresponsible creature to a cruel and ignominious death?

It is well observed by Bentham, that—

“The minimum of punishment is more clearly marked than its maximum. What is *too little* is more clearly observed than what is *too much*. What is not sufficient is easily seen; but it is not possible so exactly to distinguish an excess. An approximation only can be obtained. The irregularities in the force of temptations compel the legislator to increase his punishments until they are not merely sufficient to restrain the ordinary desires of men, but also the violence of their desires when unusually excited. The greatest danger lies in an error on the minimum side, because in this case the punishment is inefficient; but this error is least likely to occur, a slight degree of attention sufficing for its escape; and when it does exist, it is, at the same time, clear and manifest, and easy to be remedied. An error on the maximum side, on the contrary, is that to which legislators and men in general are naturally inclined—antipathy, or a want of compassion for individuals who are represented as dangerous and vile, pushes them onward to an undue severity. It is on this side, therefore, that we should take the most precautions, as on this side there has been shown the greatest disposition to err.”

ART. III.—ON INSANITY AND LUNATIC ASYLUMS IN NORWAY.

BY W. LAUDER LINDSAY, M.D., F.L.S., ETC.,

Physician-Superintendent of Murray's Royal Institution for the Insane, Perth.

A HOLIDAY tour in Norway during August last (1857) afforded me an opportunity of visiting the best Norwegian asylums, and of meeting and conversing with the first authorities on Insanity, the Lunacy Laws, the Treatment of the Insane, and the Construction and Management of Asylums, in that country. From the fact that few of our British psychologists, or physicians generally, have visited, or are in the habit of visiting, Norway, and that still fewer possess a knowledge of the Norwegian language and literature, much less is known in this country of the insane and asylums of Norway than of most other European countries. Hence we are apt to suppose that Norway—that Scandinavia generally—

behind us—behind the age—in its fiscal and medical treatment fits insane. But such is very far from being the case. Norway has reason to be proud of her liberal and enlightened treatment of her insane; and we in Britain may learn not a few useful lessons by the study of her Lunacy Laws, and of her modern asylums. The history of the treatment of the insane in Norway is somewhat similar to that in our own country. There was a period of cloud and darkness—of ignorance and prejudice—of restraint and brutality: then followed a revolution—in Norway arising from the Law of the 17th of August, 1848; and now the sunshine has burst forth, with all its vivifying influences, and liberality, and enlightenment, science and humanity are introducing the “moral system” and the law of kindness to the fullest extent. The State Asylum of Norway, at Christiania, is but a very few years old: it is worthy of the sagacity and liberality of the Norwegians. It embodies all the most recent Continental views on the management of the insane and the construction of asylums; indeed, it may be regarded as a reflection, or concentration, of the excellencies of the German asylums especially. These facts or opinions lead me to believe that some account of the treatment of insanity, and the construction and management of asylums, in Norway, will not be unacceptable to British psychologists. I shall first give a short history relative to the State Asylum for Norway, and the City Asylum proper, both in Christiania; and shall thereafter make a few remarks on the Norwegian Lunacy Laws, and on the statistics of insanity in Norway.

In describing the State Asylum at Gaustad, Christiania, I must draw largely on the first Annual Report of the institution, admirably drawn up by Dr. Sandberg, the Physician-Superintendent.* It is a quarto pamphlet, of forty-three pages, with numerous schedules and tables, and with plans of both floors of the asylum. Being a first Annual Report, it is unusually full, containing a most interesting account of the history of the institution, its cost, the architectural and economical details, as well as the ordinary routine of an Asylum Report. It consists of two sections; of these, the first is divided into the following subsections or chapters:—*a.* Site; *b.* Ground-plan of building; *c.* Water supply; *d.* Drains and sewers; *e.* Gas supply; *f.* Pleasure-grounds and garden: while the second contains chapters on—*a.* Dietary; *b.* Residence of patients; *c.* Forms of disease; *d.* Medical treatment; and *e.* Terminations of disease. The documents appended to the Report consist of a ground-plan,

* “Generalberetning fra Gaustad Sindssygeasyl, for Aaret 1856, ved Ole Sandberg, Direktør. Christiania: Trykt i det steenske Bogtrykkeri. 1857.”

“General Report of the Gaustad Lunatic Asylum, for the Year 1856, by Ole Sandberg, Physician-Superintendent.” (It bears date February, 1857.)

and plan of the second floor of the institution; statistics regarding the admissions, discharges, and deaths; amount and value of work done by patients; schedule of forms of restraint and a full table of the new dietary regulations. I have sufficiently indicated the nature of the contents of the Report: to its page I must refer the reader for fuller details than I am able to give here regarding the Norwegian State Asylum.

The State Asylum is an imposing palatial building, perched conspicuously on an eminence at Gaustad, about three and a half miles north-west of the town of Christiania, its site being one of the finest parts of Akersdal. It stands at a considerably higher elevation than Christiania. Its exposure is to the south; and it commands a magnificent prospect down the beautiful Christiania Fjord. It could scarcely possess a more beautiful site: the view surpasses that from any British asylum with which I am acquainted. So prominent is its position, that it is one of the first objects to arrest the attention of the traveller or tourist who approaches Christiania by sea; and on this account it is generally noticed in works descriptive of Norwegian topography—works which are now neither few nor far between, in consequence of the numbers of tourists, possessed of the *cacoëthes scribendi* who annually visit fair Norway. The building is evidently quite new: the airing-courts and pleasure-grounds are only yet in process of being properly laid out. The building itself is not yet complete. I had the good fortune to be present at a meeting of the “Storting,” or Norwegian Parliament, when a vote of 26,000 specie dollars* was granted for the completion of the original design. The worthy Physician-Superintendent, Dr Sandberg, was present during the discussion, and evidently took a very warm interest in the issue of the proceedings. In proportion to its accommodation, this institution appears, on first sight, a very costly one. It has already cost—for erecting the edifice and constituting the establishment—upwards of 250,000 specie dollars; and, when finished, it will have cost upwards of 300,000—equal to about 70,000*l.*! This gives a present expense per patient of 1200 to 1300 specie dollars, or between 250*l.* and 300*l.*; and a prospective expense of 1400 specie dollars, equal to more than 300*l.* a-head. Some English asylums have certainly cost sums as large, or nearly so—from 200*l.* to 300*l.* per head. But that such a heavy expenditure is not absolutely necessary is shown by the example of the new Montrose Royal Asylum—which is allowed, by competent judges, to be a model institution so far as architectural arrangements are concerned, for the pauper insane—and which is now being erected at a total cost of 50*l.* per

* The Norwegian specie dollar is equal to about 4*s.* 6*d.* English; or, in other words, 1*l.* English is equal to about four and a half Norwegian dollars.

head, or 14,000*l.* for about 300 patients. The disproportion between this cost and that of the Gaustad Asylum of Christiania is very striking; for, at present, the latter accommodates only about 160 or 170 patients, and, when completed, will not hold more than 250! In establishing a State Asylum which should be a model for the whole country—a model from which future minor asylums, in different parts of the country, will be built—the Norwegians resolved—and, to a certain extent, rightly resolved—to spare no expense in bringing the asylum up to the requirements of the age—in introducing all the most modern improvements—in supplying a full and efficient staff. But it admits of a reasonable degree of doubt, whether they have not paid too dear for their whistle; and whether there has not been, for instance, in regard to the arrangement of the wings of the building, a sacrifice of real usefulness to theoretical advantages and imposing display. The institution is probably on too extensive a scale for 250 patients: its area is too expanded, causing a dissipation of time and energy on the part of the officers. But the means of classifying the inmates—of separating the noisy and dirty from the quiet and orderly—are undoubtedly remarkably good. In building their asylum, the cure and comfort of the patients has evidently been the ruling and guiding idea; the expense has been a subsidiary—a secondary question. Everything has been done to render the establishment complete as an hospital for the treatment of insanity; everything introduced has been introduced with a view to cure, mediately or indirectly—site, view, work, amusement, furniture, &c. It may be useful, though not a little humiliating, to contrast this tendency—this desire—this unselfish liberality and enlightenment—with the theory, or at least the practice, of certain ratepayers at home, who build asylums, like workhouses, in the cheapest possible way, and without the remotest idea of, or reference to, cure, or perhaps even comfort. A disagreeable burden is cast upon their shoulders—that of maintaining their insane fellow-creatures; and they ease themselves thereof in a way which may be satisfactory to their pockets, but can scarcely be so to their consciences—to their sense of duty and justice. It is right to state here that some of the architectural arrangements of Gaustad Asylum do not meet with the approval of the Superintendent, Dr. Sandberg, who appeared to me a most intelligent, practical man, of the German school of psychologists. I know not to what extent medical men conversant with the requirements of asylums were consulted in the construction of this establishment; but from what I know of the Norwegians generally, and of their mode of transacting business, I have no doubt that their State Asylum is the result of a careful study of the best models on the Continent of Europe, by architects and

medical *experts* conjointly. This is but as it should be: if there be faults in construction, they arise not from ignorance, but from errors in judgment. Had such a policy been pursued in certain British asylums, we should not now have to deplore some gigantic, expensive, and absurd blunders. There is, unfortunately, a tendency to trust everything to architects, who have never practically felt, nor seen, the requirements of an hospital for the insane, and who are naturally more apt to be guided by questions of financial matters of mere appearance, or apparent neatness—than by the adaptation of means to an end—that end being cure and comfort of patients, not *£ s. d.* A medical superintendent has nothing to do with the designing or erecting of the building; he is only appointed till the hospital is about to be opened—in time, in fact, only to discover its imperfections without having it in his power to remedy them. This subject is one of great importance to Scotland at a time when the Scotch counties are about to build a series of district pauper asylums, similar to those of England and Ireland. I have no hesitation in affirming that the first step in establishing an asylum should be the appointment of a medical superintendent, who ought to be consulted as to site, expense, mode of constructing, heating, ventilating, water supply, laying out grounds, &c. The money expended in his salary during a year or a couple of years prior to the opening of the institution would, I feel assured, be ultimately and fully saved in the value of his advice and superintendence, and in the better adaptability of the establishment to the purposes for which it was founded. Most of the older Scotch asylums, which were designed and built entirely by architects, labour under irremediable defects in construction; and only last summer, in Ireland, in some of the asylums, or parts of asylums, built by Government, I saw several of the most expensive and grievous errors, which arose out of the simple fact that no medical *expert* had ever been consulted regarding such asylums, or departments thereof. Before leaving this subject, I may state that I found the Norwegians, generally, complaining of the expensiveness of Gaustad; and there were serious apprehensions that the Storting would not give a grant of 26,000 specie dollars necessary for the completion of the present buildings. Hence, doubtless, the anxiety, and the presence of Dr. Sandberg at the debate on the subject.

The building consists of four parallel wings, separated from each other by commodious airing courts, and communicating by covered archways and passages. They are also divided laterally into two symmetrical series—male and female sides, or departments—by a central space, which contains the “Ökonomibyggnad” or offices, &c. These wings are built somewhat alike, with the exception of the fourth, or back wing, which has at right angles

it a supplementary wing, devoted to dirty cases. They are called respectively A, B, C, D, and E, and are set apart for the following classes or kinds of patients:—A, for quiet patients of the better ranks of life—for the inmates consist of an admixture of pauper and private patients, precisely as in most of the existing Scotch asylums; B, for quiet and orderly patients of the pauper class; C, for the noisy and turbulent; D, for the violent, excited, and destructive; and E, for the dirty and degraded. All the wings are of two stories, with the exception of the fourth, or D, E, which, along with the porter's lodge, laundry, and kitchen, consists of one only. The free, or outer, end of each of the three front wings, A, B, and C, terminates in a couple of four-sided compartments, having externally buttressed projections, with windows resembling bow-windows; the one forms part of the sitting-room, work-room, or parlour; the other is occupied by the water-closet. The front wing, A, facing the south, and commanding the finest views, is devoted to quiet patients of the higher classes (*afdelingen for de rolige Syge af den dannede Klasse*). The ground floor contains, at the outer end of the corridor or gallery, the parlour or association-room (*samlingsværelse*),—a large, cheerful, comfortable room, handsomely furnished, and commanding magnificent views over the country intervening between Gaustad and Christiania, of the town of Christiania, and down the Christiania Fjord. The furniture is quite of the style of ordinary drawing-room or parlour furniture, including handsome ottomans; while pictures deck the walls, flowers ornament the tables, and books and newspapers are strewn about everywhere. The furniture is tasteful and modern; the painting or papering of the walls is new and fresh; the rooms have much of the aspect and feeling of home; and, indeed, everything at present appears to the greatest advantage. Ten or twenty years will work a change in the character of Gaustad, in all probability: the architectural disadvantages will have fully appeared; the building will look somewhat old; the officers may be less enthusiastic and full of vigour; the furniture will be the "worse of the wear;" and the Norwegians may have learned to build less expensive and imposing asylums! On the same floor are two single bed-rooms (*enkeltværelser*), and five double-rooms or dormitories for two patients (*dobbeltværelser*). There is only one water-closet, and that one far from commodious. The corridor or gallery is too narrow—very different from the spacious, handsome, light, airy corridors of some of the recently built English asylums. On the second, or higher story, there are a large association-room (*forsamlings-sal*),* with a finer and more extensive view than that from the corresponding

* I do not know what distinction is drawn between "*samlingsværelse*" and "*forsamlings-sal*," unless the former is an ordinary parlour, and the latter more properly an assembly-room.

room on the ground floor, five single bed-rooms, three double bed-rooms, and an attendant's room (*tjenerværelse*). The second wing, B, is occupied by quiet patients of the poor or pauper class (*afdelingen for rolige Syge af Almues klassen*). The ground floor contains, at the near end of the gallery, a dining-saloon (*spisværelse*), three dormitories (*soverværelser*), and a work-room at the further end of the gallery, in the place occupied by the sitting room or parlour in the front wing, A, and of the same size and form. The corridor and water-closet are of the same size as in front wing. The second story contains a large association-room of the same size and position as in front wing, and five dormitories. The third wing, C, is set apart for the turbulent and noisy (*afdelingen for urolige Syge*). The ground floor contains a large work and day-room at the free end of gallery, of same size as the work-room in wing B, nine single bed-rooms, and corridor and water-closet, as in last wing, B. The second story possesses four dormitories (*fælles Soverværelse*), one single bed-room, and an association-room, at the farther end of gallery, of same size and position as in two front wings. The excited and destructive cases occupy the fourth, or back wing; and the dirty, the sub-wings at right angles thereto, but connected therewith (*afdelingen for rasende og for urenlige Syge*). There are here an association-room (*forsamlingsværelse*), at the angle of junction of the two wings, two watch-rooms or attendants' rooms (*vogterværelser*), bath-room, water-closet, drying-room (*tørreværelse*), and thirty "cells" (*celler*) or single rooms, lit from above.

Between the male and female sides of the third wing is the laundry (*Vadskeri*); and between the two halves of the second wing stand the offices, known collectively as the "Ökonom bygning." This consists of two stories, and includes, on the lower or ground floor, the offices of the superintendent and steward, the medical library and consulting-room, the visitors' room, the steward's residence, kitchen, larder, pantry, laundry, store-room and servants' rooms; and, on the second story, the chapel as recreation-room, chaplain's residence, and apartments belonging to medical assistant, apothecary, housekeeper, and other officers. These offices, &c., are connected directly by a gallery or passage with the male and female sides of the second wing. The house steward's office is a roomy, comfortable, counting-room, in which several clerks were busied with the house books. There is a great want of this department, and of such an officer, in many of our British asylums. In too many cases is all, or great part, of the steward's work devolved on the unfortunate superintendent, who becomes, or is made to become, a mere drudge, a "Jack-of-all trades," and who cannot possibly properly discharge the medical duties of his office when fatigued and exhausted by the merest clerk.

work—by the attention necessary to the keeping in order several dozens of ponderous and absurd books. The medical superintendent has here also a handsome and commodious parlour adjoining the steward's office, as a consulting-room, where he can conveniently confer with his subordinates or with visitors. This room contains a good medical library, supplied by the asylum—a library embracing works, and all the periodicals, on insanity, in every European language. I noticed the “Journal of Psychological Medicine,” occupying a prominent place on its shelves, besides a variety of English works on insanity. The establishment of such a library, for the benefit of the medical and other officers, is worthy of imitation in this country. In too many cases the superintendent cannot afford to purchase expensive foreign works on insanity; and directors of asylums seem either conveniently ignorant that there is such a thing as a literature of insanity, or they grudgingly decline placing it at the command of their officers. Every superintendent ought to be *au courant* with asylum literature, and he ought to be stimulated and encouraged to do something towards the advance of psychological medicine in general, or of some department thereof in particular. This institution further possesses a very complete laboratory or surgery, with all the recent introductions in the way either of drugs or apparatus—thus showing how thoroughly the medical officers keep themselves abreast of the progress of the age in regard to the medical treatment of insanity. The kitchen and laundry appeared to me to be models; I do not remember ever to have seen a finer kitchen. It is very spacious, exceedingly well lighted and ventilated, kept scrupulously clean, and furnished with the newest and most economical furnaces, boilers, kitchen-ranges, &c. The chapel is divided into neat pews, on which the Bibles and Prayer-books were laid out ready for use. The chaplain is resident, and he appears to act also as schoolmaster and to superintend the intellectual pursuits of the inmates, under the direction of the medical superintendent. I am not aware that there is any such full union of duties in the person of the chaplain in any of our British asylums. I know that in some English asylums the chaplain acts also as schoolmaster; but this, even, is found in comparatively few. Nevertheless, the combination is a good one, and one that I should like to see introduced in Britain to a fuller extent. In every asylum, it appears to me, there should be arrangements for educating such of the patients as stand in need thereof and will be benefited thereby, and for stimulating, in proper cases, and cherishing, the literary tastes of the better educated classes. My own experience teaches me that much may safely be done in this direction. The present and former chaplains of the institution with which I have the

honour to be officially connected, have both offered public testimony to the advantages accruing from the introduction of the educational element in asylums.* The inmates of Gausta, however, have neither lectures nor classes, as some of the Scotch asylums have had for years, and with such good result as to have encouraged others to follow their example. A bath-house is connected with each half of the third wing, on either side of the laundry, containing, if I remember aright, five baths, the baths being of wood. There is a plentiful and never-failing supply of water to all parts of the house, by means of an aqueduct from the Frogner-elv, a small stream rising in the hill behind, and passing near the asylum. The whole establishment is also lighted with gas, which is conveyed in pipes from the city.

Between the two halves of the front or first wing is the porter's lodge,—a handsome little edifice, which commands, as in most asylums, the principal access to the building. Between it and the "Ökonomibygning" is a spacious court, with a small circular pond and a fountain in its centre, the latter being made to play easily by turning a cock. Dr. Sandberg was kind enough to cause a display of this "water-work" in my presence and for my benefit. Certainly this is an elegant ornament at a small expense: I would gladly see ponds, stocked with gold and other fish, and ornamented with rockeries, as well as fountains, introduced in the grounds of our British asylums—especially those for the higher classes of patients—where there is an abundant supply of water from a higher elevation than the asylum or its grounds. There are still a few points, good and bad, in or about the building itself, to which I would briefly advert before leaving this section of my subject.

The medical superintendent has a separate, handsome, commodious house, healthily exposed, and commanding as fine a view, and in the same direction, as the asylum itself. This is a point too often overlooked by the managers of asylums, in their zeal for economy—I mean the provision of suitable accommodation for the physician-superintendent and his family. Too often compulsory celibacy is enforced; he is stowed away in two or three miserable apartments in the asylum, perchance in its most noisy and bustling locality, having neither time nor place that he can call his own. This is not only cruel and unjust towards the superintendent himself, but it is a false economy and bad policy in regard to the management of the institution. If there is a position in life in which the most irksome and harassing routine duties should be alternated with every comfort and re-

* "Excelsior; or, Murray's Royal Asylum Literary Gazette," January, 1866—No. 4.—"Reports of our Inspectors of Schools."

laxation that life can offer or supply, it is the position of an asylum-superintendent. There is no situation, perhaps, attended with a greater degree of mental exhaustion,—none in which the sacrifice of mental and bodily vigour to the shrine of duty is more apparent, more certain. If the superintendent has not a comfortable home,—if he is immured day and night in some of the asylum cells, or, to phrase it more elegantly and pleasantly, apartments, he is little likely to remain long an efficient officer of the establishment. Indeed, he will, sooner or later, become mentally and physically unfit for the arduous duties of his office; or, if he is forced to struggle on in consequence of the *res angustæ domi*, or otherwise, he becomes a mere machine—a nonentity, void of energy, enthusiasm, and ambition—and goes his daily, weary round like a jaded horse in a mill! I do not say that such is uniformly and infallibly the case; but I do say that such is infallibly the tendency, in the circumstances I have sketched. In either view, the asylum is the loser; that is, whether there are frequent changes in the staff—for changes are not always for the better—or whether the superintendent becomes superannuated in harness. Let us hope that the managers of the new Scotch asylums will consult their own interests, as well as the best interests both of their medical officers and of their patients, by providing separate and adequate house accommodation for their medical superintendents. The female wings of Gaustad Asylum look east, while the male wings look west, the females having, therefore, decidedly the best of the view. The building, when completed, the male and female wings being symmetrical, is intended to accommodate the following number of patients:—A 18, B 50, C 35, D and E 20; or, in all, 123 of each sex—a total of 246; in round numbers, as I have already stated, 250. Due attention seems to have been paid to the provision of an ample amount of breathing space for each patient in the bed-rooms, as well as in the day-rooms. Some of the single rooms, at least, appear to contain about 2700 cubic feet of air,—a large proportion in comparison with that existing in many British asylums. There is comparatively much less space in the dormitories, however, 6160 cubic feet being allowed for a dormitory occupied by eight patients—that is, about 770 cubic feet to each. Though the practical carrying out of such an idea is necessarily expensive, I think, where it can be done from an abundance of funds, liberality and enlightenment on the part of the directors, or otherwise, that each patient should not have less sleeping room than 1000 cubic feet of air. In the pauper gallery for quiet cases, the dining saloon is so capacious as to be capable of accommodating sixty persons; and all the work-rooms, parlours, and association-rooms are comfortable, capacious, and well lighted

and ventilated. The windows generally open inwards; their construction the architect does not appear to have been by the absurd idea, unfortunately too prevalent among architects, that asylum windows must be guarded as those of a prison, and that every patient, if he has opportunity either precipitate himself suicidally therefrom, or effect his thereby. The result is, that the windows are much more those of a private house than is usually the case in asylums. The accommodation provided for patients of the middle and higher ranks is particularly good. The gentlemen have billiard-tables, and the ladies their pianos, as we have. I have observed that the proportion of single rooms to dormitory accommodation is considerable; dormitories, indeed, are comparatively few, and are intended only for the quiet and well-behaved. This undoubtedly is one cause of the expense of the asylum; but the arrangement appears to me a good one. Dormitory accommodation diminishes expense, and to a certain extent of it is undoubtedly desirable in every asylum. It appears to me that its advantages are greatly overrated, and that, so far as the proper treatment, with a view solely to the recovery of the patient is concerned, the importance of single rooms is greatly overlooked in our British asylums. The seclusion-rooms, or single rooms for the refractory and dirty, are well lighted from the top, as they ought to be. But I have great objections to the plan in a corner of each room, a hybrid between a water-closet and a stool, the pan of which can be removed when desired by a glass opening into the gallery. Nor do I like a gallery running along the top, and externally to, the top of these rooms, commanding a view from above of the actions of their inmates. This is but a cheap and expensive substitute for the old inspection plates. None of these arrangements seemed to meet with the approval of Sandberg. Double bed-rooms, or dormitories for two patients, do not seem to be regarded in so objectionable a light here as they are in England. They are supposed by the English superintendents to encourage habits of sodomy and other vices; but this objection appears to me purely theoretical, at least so far as Scotland and Norway are concerned. Some of the Scotch asylums have used double bed-rooms for a long series of years with no ill but the best results; and so far from its being an objectionable arrangement it is extremely salutary and advisable—for instance, in the case of hysterical, timid girls, who are afraid to go out alone, or in rooms by themselves. I should certainly at first oppose the occupation by two persons of a bed-room properly fitted out only for one—that is, containing only between 50 and 1000 cubic feet of air. But so far as my experience goes I am glad to find it borne out by the practice of the Norwegians.

State Asylum—it is as little objectionable for two to sleep in a dormitory as for six, or any larger number, to say the least of it. The water-closets are on the self-acting principle—that is, a rush of water occurs every time the door is opened. Dr. Sandberg seemed satisfied with the arrangement, which is certainly theoretically ingenious, but has been practically found, in many British asylums, unserviceable to the extent that it is liable to get out of order, and to be made a bad use of by the patients, who sometimes take a malicious pleasure in running off all the water in the cisterns connected with such water-closets. A more extended experience may, and probably will, modify Dr. Sandberg's opinion of the usefulness of this description of water-closet, and may drive him to be content with the old and apparently clumsy system of plugs and flush-drains. The water-closets in this asylum are, moreover, much too small and inconvenient, and much too few,—both serious defects in a modern hospital for the insane. The corridors, or galleries, also, are generally too narrow, and not sufficiently cheerful, open, and well lighted. The galleries and the inspection balconies have too much of a prison appearance about them. The covered passages connecting the different wings across the airing courts are most useful in bad weather; they are suitably provided with seats. Similar arrangements are to be seen in many of our British public schools and hospitals, and are uniformly found of service.

Gaustad Asylum is chiefly intended for native Norwegians, and for curable cases; but incurable cases are not excluded if the medical superintendent states there is vacant room, and recommends their admission. Foreigners are admissible only when the form of insanity in them is curable, or when their insanity prevents their leaving the kingdom. They are admitted, however, only to the department for the middle and higher ranks, and they are charged 20 per cent. more than natives. The rates of board are regulated from time to time; but those chargeable for patients of the better ranks are more fluctuating than those for paupers, the pauper charges having been regulated by the Law of the Storting of 17th August, 1848. From the circumstance that the institution has been but a comparatively short time in existence, fixed rates of board can scarcely be said yet to have been determined on; but they will probably, in the case of the poorer classes, at least, be pitched as low as is consistent with remuneration—profit being kept out of view as no element in the question. The rates of board include all necessities save clothing. There are several sources of revenue to the institution, the principal being grants of money from the Storting, the board of patients, and the profit of labour. The form necessary for admission closely resembles that followed in this country: there

must be produced to the superintendent—or director, as he called in Norway—a medical certificate of insanity, a bond payment of board, and a requisition or application for admission. But the director has the power of waiving this ceremonial urgent cases, at his discretion.

The asylum staff is very ample, and, apparently, very efficient, the medical details being confided to the director, assisted by a sub-physician, and several internes or clinical pupils; the director, further, having supreme control and a general superintendence over all the officers of the establishment, and over all their actions and intrusions. There is a very full and admirable code of provisional regulations (forty-eight pages 8vo),* of which the following is the Table of Contents:—Chap. I. General Regulations (*Almindelige Bestemmelser*). Chap. II. House Regulations (*Husorden*). Chap. III. Special instructions: for A. Director or Physician-Superintendent,—an officer who holds the same position as the medical superintendent, or resident medical officer, of the British asylums:—B. Assistant Medical Officer (*Reservelegen*):—C. Internes, or clinical assistants or clerks (*Ca didaterne*):—D. House Steward (*Forvalteren*):—E. Treasurer or Cashier (*Kassereren*):—F. Matron and Head Attendant (*Matronen og Overvokteren*):—G. Attendants (*Vogterne*):—H. Head Laundress (*Oldfruen*):—I. Housekeeper (*Husholdersken*):—J. Engineer (*Maskinisten*):—L. Barber (*Barberen*):—M. Farm Overseer (*Avlskarlen*):—N. Gardener (*Gartneren*):—O. Porter (*Portneren*):—P. Night Watchers (*Nattevogterne*):—Q. Cooks (*Kjøkkenpigerne*):—R. Laundresses (*Vaskepigerne*):—S. Messengers (*Budeierne*):—T. Stoker (*Fyrbøderen*):—U. House Servant (*Budet-Huskarlen*):—V. Farm Servant (*Gaardskarlen*). The foregoing enumeration is sufficient to indicate that the staff is in some respects, if not in all, a model one; and in regard to completeness, it is certainly worthy of imitation in this country. There may be an approximation to such a staff in some of our large asylums; but I am not aware of any asylum of similar size—so commodating, at present, only between 160 and 170 patients with anything like so perfect a machinery for its due management. Such a machinery, however, cannot be maintained unless at a great expense; and this must be borne in mind in questions affecting the cost of erecting and maintaining Gaustad Asylum.

The salary of the superintendent is, I believe, about 1600 to 1800 specie dollars, or about 400*l.* a-year English, with a large house, as I have already mentioned. This allowance is certainly not too much: perhaps it may be increased when the establishment possesses its complement of patients. He has the

* "Midlertidigt Reglement for Gaustad Sindssygeasyl. Approberet i Kongelig Resolution af 29^{de} August, 1858."

control—as every superintendent ought undoubtedly to have—both of the medical and fiscal departments of the management. All the officials are under his orders; and he has the privilege and power of appointing all save the chaplain, medical assistant, steward, and treasurer, whom he merely nominates. It will thus be noticed that the matron is not placed on the same footing as in this country; she occupies altogether a subordinate position. The principle of having her appointed by, and entirely subordinate to, the medical superintendent, is certainly the right one. This arrangement avoids the collision of conflicting powers and positions which not unfrequently occurs under other circumstances. The superintendent or his substitutes give all necessary information regarding the admission, &c., of patients, and grant all requisite certificates; he conducts all correspondence; keeps certain registers, or “protocols,” as they are called in Norway, and draws up certain reports and statistics, conformably to the law of 17th of August, 1848, sect. 5 and 6. He gives clinical instruction to his internes, or pupils—an excellent arrangement, worthy of all imitation. Thanks to the regulations for admission into the medical service of the East India Company, several of our public asylums now give courses of clinical lectures on insanity and its treatment—for example, Bethlehem and St. Luke’s in London, the Royal Asylums of Edinburgh and Aberdeen, and the District Asylum at Belfast; but otherwise there is little or no arrangement for clinical teaching. The opportunities of hospitals for the insane are not duly made available, and the consequence is, that comparatively few medical practitioners know anything practically of the proper treatment of insanity, and of the construction and management of hospitals for the insane. Every asylum, in my opinion, ought to have, in proportion to its size, one or more clinical assistants, who may be resident or not, according to circumstances, but some of whom, I think, should be resident, and others not, just like the internes and externes of the Parisian hospitals—the resident and non-resident clerks of our British general hospitals. They might be appointed for limited periods, so as to ensure a succession of fresh, energetic, and enthusiastic pupils and assistants. Such an arrangement would possess many advantages. Every asylum would become a psychological school, and would send forth medical practitioners conversant with a department of medicine of which they are at present deplorably ignorant—psychological medicine; the pupils would act as assistants to the superintendent, who would be thus relieved of a vast amount of drudgery in the writing out of cases, drawing up of statistics, compounding of drugs, and in minor surgical operations, &c.; while the presence of pupils, and the existence of other similar hospital-schools, would stimulate him to keep him-

self *au courant* with the progress of psychological and medical science, and to use his best efforts to maintain the reputation of his particular asylum or school, or to outdistance his compeers in a friendly competition. The arrangement would not be a costly one; no difficulty would be experienced in getting candidates for these appointments; students of medicine would eagerly offer their services in exchange for the opportunities offered, especially in asylums of superior reputation, or in the larger or university towns. At least once a month the superintendent of Gaustad Asylum calls together a council, consisting of the chaplain, assistant-physician, steward, and treasurer, and such of the subordinate officers as he sees fit, for the purposes of conference and instruction. This must afford him a good opportunity of explaining his views, which views are much more likely to be carried fully into effect if they are intelligently understood than otherwise. His other duties and powers are so similar to those of asylum-superintendents in this country, that they need not here be enumerated.

The assistant-physician is appointed for three years; he is removable on three months' notice, and he cannot leave without giving three months' intimation. He is invested with plenipotentiary powers in the absence of the superintendent. He receives and examines new cases, determining to what part of the house they are to be sent, &c.,—subject, however, to the approval of the superintendent. He specially supervises all subordinate officers; performs *post mortems* and simple surgical operations; keeps certain books; and assists the superintendent, if required, in correspondence, the drawing up of reports and returns, in chemical investigations, and otherwise. The surgery is under his charge, with the drugs, re-agents, apparatus, and surgical instruments. He acts as librarian, is conservator of the scientific and literary library, and draws up the catalogue. He sees specially that the internes, matron, and head-attendant discharge their respective duties.

Three "internes," or clinical pupils, are appointed by the superintendent as assistant medical officers. They hold office for one year; and the appointments are so arranged, that only one falls to leave or resign his office at a time. They are subject to the superintendent and assistant-physician; they accompany them in their daily visits to the galleries,—just as the clinical clerk follows his physician or surgeon in walking the wards of a general hospital,—carry out their medical instructions, keep journals of the cases, write prescriptions to dictation, do the bandaging, assist in minor surgical operations, and superintend and instruct the attendants in bandaging, the application of blisters, and similar operations. They likewise assist in making out registers

of patients, lists of medicines, statistics of disease, &c. They have exercises in psychological medicine prescribed to them by the director or his assistant. After the daily medical visit, one of the internes is placed in charge for the day; and it becomes his duty to look after the giving out of medicines and surgical appliances, to order supplies of medicine from town, and to see that the medicines are properly distributed, and the prescriptions or directions of the superintendent and assistant-physician duly carried into effect. In urgent cases, in the absence of the superior medical officers, the interne in charge for the day acts as their deputy, and does what he considers necessary. He is precluded leaving the institution during his day of charge, unless either the assistant-physician or another interne take his place. This secures that a medical officer is always to be found in the institution—another admirable arrangement, worthy of being followed in this country, and an additional advantage springing from the appointment of clinical assistants. An interne may obtain leave of absence for a day from the assistant-physician; but, if he desire a longer holiday allowance, he must apply to the superintendent.

The house-steward is an officer of considerable importance; and his appointment, as well as that of a resident treasurer, relieves the superintendent of an immense amount of most irksome mechanical drudgery, which would otherwise, in great measure, dissipate time that is more worthily and profitably employed. There is no doubt that the work laid upon the shoulders of many of our asylum superintendents in this country should properly be distributed among three officers—superintendent, treasurer, and clerk. His talents and skill should not be misapplied, his energies unprofitably dissipated, and the natural order of things reversed, as at present. The steward has immediately under his jurisdiction the matron, head-attendant, laundresses, housekeeper, attendants, farm overseer, engineer, gardener, porter, night-watch, and other servants of whatever kind.

The treasurer, like the steward, is appointed by the Department for the Interior (*Departement et for det Indre*), on nomination by the superintendent, and he is bound to give 1500 specie dollars security. Besides fulfilling the proper duties of a treasurer, he acts as bookkeeper and secretary, and checks, to a certain extent, the steward. He has an office in the institution, the business hours being 9 A.M. till 2 P.M. He does not necessarily reside in the building, but is allowed, if he prefer, to live somewhere in the vicinity.

The machinist or engineer has charge of the apparatus for water and gas supply, for heating, and also of the sewers; and he does any smith-work required about the house. When the

asylum possesses a smith's forge, as it contemplates doing, this will also be placed under his jurisdiction. He is directly under the control of the steward, as are also the gardener and farm overseer. There are both a male and female night-watch; but I am not aware how far this arrangement has been found to answer. The proportion of attendants to patients is as 1 to 6 or 8. This is a large and favourable proportion in comparison with that to be found in some of our older asylums, especially, where the proportion falls so low as 1 in 10, 15, or even 20. This large proportion, of course, adds materially to the cost of maintaining the establishment, and is another item of the expense of construction and management to which I have already more than once alluded.

Let us now return to Dr. Sandberg's First Annual Report, and cull therefrom some particulars regarding the statistics of this institution, and the treatment—dietetic, medical, and moral—its inmates. The statistical tables, with which the Report is abundantly furnished, are based on a classification or division of the inmates into pauper patients, or those paid for by parishes or districts, and private patients, or those paid for by private friends. This division is, to a certain extent, a useful one; it is now being introduced into the statistical reports or tables of the Scotch asylums. The total number of patients under treatment during the year 1856 was 219—132 belonging to the pauper class, 77 males and 56 females; and 87 to the private class, 50 males and 37 females. The following were the native districts of these patients:—

Akershus Amt	44	Grimstad	1
Jarlsberg Amt	25	Lister and Mandals Amt	4
Christiania	18	Sarpsborg	1
Bratsberg Amt	18	Skien	1
Hedemarkens Amt	22	Kongsberg	1
Nedenæs Amt	12	Drammen	1
Smaalenes Amt	10	Bergen	1
Budskeruds Amt	12	Nordre Bergenhus Amt	1
Christians Amt	9	Nordlands Amt	1
Frederikshald	3	Soon	1
Laurvig	3	Kragerö	1
Aalesund	1	Svelvig	1
Arendal	1	Brevig	1
Christiansand	1	Flekkefjord	1
Røraas	1	Christiansund	1
Romsdals Amt	2	Kobbervig	1
Thronhjelm	2	Stavanger	1
Frederikstad	2		

The ages of those under treatment were:—

Under 20 years	11	Between 50 and 60	3
Between 20 and 30	71	„ 60 and 70	1
„ 30 and 40	64	„ 70 and 80	1
„ 40 and 50	36		

the duration of the disease, or of the last attack thereof, prior admission, was:—

	M.	F.		M.	F.
From ½ year	31	29	From 5 to 6 years	4	2
1 ½ to 1 year	22	19	6 „ 7 „	2	1
1 „ 1½ „	11	9	7 „ 8 „	4	3
1½ „ 2 „	7	2	8 „ 9 „	4	2
2 „ 3 „	18	4	9 „ 10 „	3	1
3 „ 4 „	9	8	10 „ 15 „	3	5
4 „ 5 „	3	6	15 „ 20 „	3	2

In regard to relapses, or multiple attacks, 14 males and 16 females had had 1 previous attack; 8 males and 2 females had 2; 2 males and 1 female, 4; and 5 males and 7 females, 5 or more.

The causes of insanity in the 219 patients under treatment are as follows:—

	M.	F.		M.	F.
Hereditary	17	16	Typhus	1	3
Alcoholism	26	4	Imprisonment	3	0
Disappointments in love	13	10	Disorders of digestive system (fordøielssbesvær)	2	1
Overindulgence and intoxication	19	3	Apoplexy	2	0
Emotional sorrows	5	17	Blood-letting	2	0
Religious scruples	9	5	Remorse of conscience	2	2
Excitation (ærgrelse)	11	2	Uterine diseases	0	2
Head	3	7	Home-sickness	0	2
Illness, and mercurialization	10	1	Illicit intercourse (besvan-gring)	0	2
Over-exertion (overanstrengelse)	9	0	Disease of brain	0	2
Pregnancy and parturition	0	9	Phthisis (tuberkulose)	0	2
Excitation and its causes (springssorger)	3	3	Jealousy	1	0
Excessive use of alcohol	2	2	Measles	1	0
Use of head	3	1	Bronchitis	0	1
			Pneumonia	0	1

Dr. Sandberg divides causes into psychical and physical; but apparently finds the same difficulty that we in Britain do in ascertaining special causes, or causes at all, or in determining, in any given case, the cause belongs purely to the one category or to the other. Hereditary transmissibility is well illustrated by the next Table, which shows in what relatives insanity had previously developed itself:—

	M.	F.
Great-grandfather (oldefader)*	1	0
Great-grandmother (oldemoder)	2	0

As showing the composition and etymology of Norwegian words, and their resemblance to the English—or rather the Scotch—I have given in the next Table the Norsk words for the persons or relational terms therein expressed. Those who are etymologically inclined, or who are fond of the philosophy of language, will find some most interesting studies in the Scandinavian languages; and, in the Icelandic, or original Norsk, in the Norwegian of to-day, which is a modification of the Danish, and in the Danish itself. I had the pleasure of a most interesting discussion on the analogies of the Norwegian and Scotch languages

264 ON INSANITY AND LUNATIC ASYLUMS IN NORWAY.

	M.	F.
Paternal grandfather (farfader)	4	1
Paternal grandmother (farmoder)	2	1
Maternal grandmother (mormoder)	4	4
Father (fader)	9	2
Mother (moder)	13	12
One or more brothers (brødre)	7	12
One or more sisters (søstre)	4	5
Paternal uncle (farbroder)	4	2
Maternal uncle (morboder)	4	4
Paternal aunt (faster)	6	3
Maternal aunt (moster)	5	4
More distant relatives	11	10

The influence of the mother in transmitting the predisposition to insanity to her offspring is here abundantly evident.

The admissions during the year appear to have amounted to 157—92 males and 65 females. In regard to admissions, the superintendent seems to have much more real power than with us. No sheriff, justice of the peace, clergyman, or elder stands between him and the applicant for admission. He has certainly to do with a "Control Commission," of which more anon. The method of procedure, I conceive, approaches much nearer simplicity, and consequently efficaciousness, than either the present or the past Scotch system. The form of insanity in the patients admitted was:—

	M.	F.	Total.
Melancholia	37	34	71
Mania	26	17	43
Stupidité	4	0	4
Delirium tremens	2	0	2
Dementia	17	13	30
Idiotism (acquired)	1	0	1
Epilepsy with mania	0	1	1
General paralysis	3	0	3

The prevalent form of insanity appears, therefore, to be melancholia; the sexes are nearly equally affected, the males slightly predominating. It constitutes nearly one-half of the whole cases admitted, and is more than equal to both mania and dementia conjoined. So far as I could learn, melancholia seems to be also the most common form of insanity throughout Norway. This has been attributed—with what justice I know not—to the facts that the population is thinly scattered, that the people live at great distances apart—isolated, as it were—greatly shut out from intercourse with the world, surrounded by gloomy mountains, and by what was called by a young Norwegian, whom I once

with two of the most distinguished linguists and philologists in Norway—the celebrated Professor F. A. Munch, author of "Det Norske Folks Historie," and Professor C. R. Unger, both of the University of Christiania, the former Professor of History, the latter of Modern Languages.

encountered on the summit of Ben Nevis, "wild nature." Mania ranks next in order of importance. The sexes are affected unequally—26 males to 17 females, nearly double. Dementia follows. Here, again, the sexes are nearly equally affected; the males, however, again predominating. But, in estimating the relative frequency with which the sexes were affected, it is necessary to bear in mind that a much larger proportion of men was admitted than women—92 to 65. The numbers given above relate to the absolute admissions, not to their comparative frequency as to sex. General paralysis occurs in 3 cases, all males. This is in conformity with our experience in this country. Delirium tremens occurs in 2 males. It does not appear whether these cases were admitted by mistake, or whether delirium tremens is regarded in Norway as a form of insanity. I see no reason why, to a certain extent, it should not be so considered, and rendered liable to all the disabilities of insanity. Medical jurists will find a difficulty in establishing any valid difference between delirium tremens and insanity, unless that, in the former case, the paroxysm or attack is generally of much shorter duration. In classifying the forms of insanity, Dr. Sandberg recognises primary and secondary forms. The former are marked either by mental depression or exaltation, and they may be either simple or complicated. His typical or primary forms are melancholia and mania. A very common complication of the primary forms is stupor: hence we have melancholia with stupor, or stupidité—a well-marked form of insanity. The secondary forms are characterized either by confusion of ideas (*forvirring*) or by dulness of intellect (*sløvhed*). They include dementia (the "*wahnsinn*," "*verrücktheit*," and "*verwirrtheit*" of the German psychologists) and idiocy, with their complications, among which are epilepsy and general paralysis. In regard to the proportion in which the two great classes of patients—pauper and private—were affected with the chief forms of insanity—

	Pauper cases.	Private cases.
Melancholia occurred in	30	41
Mania " 	29	14
Dementia " 	21	9

The discharges during the year amount to 65—less than one-half the admissions. But it was to be expected that the latter should largely preponderate over the former in a new institution. The cured, relieved, and improved stood in the following proportions:—

	Pauper.	Private.	Total.
Cured	16	13	29
Improved	1	6	7
Uncured	12	17	29
Total			65

The recoveries are thus 29, in relation to 65 discharges, 1 admissions, or 219 patients under treatment during the year. 29 recoveries, 18 were females and 11 males. The recoveries occurred at the following ages:—

	M.	F.
Under 20 years	4	0
Between 20 and 30	5	2
" 30 " 40	1	6
" 40 " 50	3	0
" 50 " 60	2	2

The duration of insanity in the same cases was:—

	M.	F.
Under $\frac{1}{2}$ year	6	6
Between $\frac{1}{2}$ and 1	5	3
" 1 " 2	2	1
Three years or upwards	1	0

In connexion with the subject of discharges, it is necessary here to mention that no patient is allowed to remain in the asylum longer than two years, as a general rule; but exceptions may be made by the superintendent, if the interests either of the patient or of the institution seem to require them. 7 deaths were 6, 5 males and 1 female, or 4 pauper and 2 private cases—a sufficiently small mortality.*

One of the most important subjects in connexion with the treatment of the patients in this asylum is that of the diet regulations. I append hereto a table and accompanying explanations, not merely for the purpose of showing that the patients, and especially the pauper patients, are very well cared for as to food, but also with a view to indicate the nature of the Norwegian articles of diet as contrasted with our own. Some of them are peculiar to Norway, or common to it with other countries in Northern Europe, but little known in England, though one of them at least is comparatively familiar in Scotland. The one in question is the national dish, "Gröd," which is equivalent to Scotch porridge; it forms the bulk of the food of the peasantry, a remarkably good food it is. The native Norwegians generally use water-gröd, made of oat or barley-meal and water, and supple it with milk; but for strangers, if they consent to make it at all, for they regard it as unfit for the fastidious palate of the English tourist—they make it with milk or cream, flavouring it with sugar, and doing it up with oil, &c. I preferred infinitely plain water-gröd, and I found it frequently a most satisfactory meal—where, it must be confessed, nothing else was sometimes to be had—after a day's journey on foot or horseback on the bl

* Full tables of the admissions, discharges, deaths, &c., will be found in the schedules appended to Dr. Sandberg's Report, entitled, "Extract af Gensindsygeasyls Personalprotocoll for Aaret 1856."

Norwegian Fjelds. Rye bread is another national article of diet—the staple home-baked bread of the poor Norwegian. In the towns, white or wheaten bread may be had, though it is greatly dearer; but in the interior, nothing in the shape of bread can be had except rye bread and various forms of cakes, resembling Scotch oatmeal cakes, made of oat or barley-meal, variously seasoned. The rye bread has, to the stranger as yet unacquainted with it, a most forbidding or repulsive aspect; it is very dark, like the black bread of the Spartans—heavy, moist, and sour. The natives prefer it sour and moist, and make it so intentionally; and they bake very large quantities at a time—sufficient to last over weeks or months, as the case may be. It varies greatly in character in different parts of the country and in different families, some making it sweeter, lighter, and drier than others, according to taste. Many of the sport-loving Britons who, every summer, frequent the Norwegian Elvs to fish the salmon, or the Norwegian Fjelds to shoot the reindeer or bear, get rye bread baked specially for themselves, sufficiently sweet to be palatable. I had some difficulty in resigning wheaten bread on leaving Christiania for the interior; but, after sundry disagreeable gastric symptoms, I soon became fond of it, or rather the stomach exhibited a tolerance of it for the days and weeks during which it became necessary to subsist mainly on this fare. Previous acquaintance with it in Germany rendered this less difficult than might otherwise have been the case. In the latter country I have seen it so coarse that horses and men fed equally upon it. Yet a third dietetic peculiarity of the Norwegians is their cheese, particularly their “ged-ost,” or goat’s-milk cheese—for they are great cheese-makers and cheese-eaters, and have an infinity of kinds. This is very sweet, and, to my taste, nauseous; in Norway, however, it is evidently regarded as a great delicacy. But, to return to the dietary of the Gaustad Asylum, I am bound to confess that it appears to me remarkably good. I speak particularly of the pauper, or lowest, scale of dietary. That for the higher classes is as ample and varied as it could be in a private home; while that for the paupers is infinitely better. For if we contrast the asylum dietary with the ordinary food of the poorest classes of Norwegians, especially those in remote country districts, living far from supplies from towns, and subsisting almost entirely throughout the year on rye bread, gröd, and milk, with cheese and butter, seldom tasting animal food, there is great reason to commend the liberality of the managers of Gaustad. These gentlemen evidently regard insanity as a disease dependent on, or connected with, impaired nutrition, and requiring, therefore, for its proper treatment, as a basis for all medical or moral means of cure, a diet both good in quality and full in quantity. Every day the patients

have coffee or tea, bread and butter, for breakfast: the proportions being $\frac{3}{4}$ lod—the Danish “Lod” being equal to our $\frac{1}{2}$ oz.—coffee-beans, or $\frac{1}{2}$ lod tea, $\frac{3}{4}$ lod Havannah sugar, and $\frac{1}{2}$ pægel—a pægel being equal to about $\frac{1}{2}$ pint English—of milk, 16 lod rye bread, and $1\frac{1}{2}$ lod butter. The higher classes have also a portion of white or wheaten bread (*hvedebrød*). At dinner, again, there is considerable variety of meat and fish, fresh and salt, with soups and vegetables of different kinds. The dietary is certainly both more ample and more varied than that of most of our district or pauper asylums in this country. The error, if error it be, in our asylums is rather in the form of too great sameness than of too small allowance; but the one is sometimes as productive of serious effects as the other evil. I know not what dietary regulations may be established in the new Scotch asylums; but it is to be hoped the General Board of Lunacy for Scotland will not be content with a minimum standard. The patients in Gaustad Asylum have three regular meals—breakfast, dinner, and supper; but all who work, or otherwise deserve or require them, have an “*eftermiddagsmad*,” or afternoon lunch, between dinner and supper, and a “*mellemmiddagsmad*,” or forenoon lunch, between breakfast and dinner; and as the majority of the patients work, there are virtually four meals daily in winter, and five in summer. The hours for meals are as follows:—

Breakfast	. . .	6	A.M. in summer.
”	. . .	$7\frac{1}{2}$	” in winter.
Dinner	. . .	12	noon for pauper patients.
”	. . .	1	P.M. for private or higher class patients.
Supper	. . .	7	” in winter.
”	. . .	8	” in summer.
Eftermiddagsmad	. . .	4	” for workers.

The record of the industrial department (*arbeidvirksomhed*) is very interesting and satisfactory, and shows the authorities of the Christiania State Asylum to be fully alive to the importance of occupation—of useful and productive labour—both as a means of cure and as a source of profit. But the Norwegians go farther than we do in regard to the prescribing of occupation or labour for their patients. Work with them is rendered compulsory (I presume the regulation refers chiefly to the pauper classes), and the indolent and refractory are punished—even with restraint or seclusion, as it would appear. This restraint or seclusion is recommended to be as short and as mild as possible; but, query, to what extent is it at all necessary or judicious? Most authorities agree as to the advisability, or at least harmlessness, of holding out rewards to the insane for good conduct and industry; but the subject of punishment is one, to say the least of it, which is usually avoided as a difficult and delicate one. I do not intend here to open up the question; but I am bound to

*showing the Dietary Regulations of the State Asylum of Norway at Christiania.**

the t.	Dietary for better Classes. (Bedre Forpleining.)	Ordinary Diet for Pauper Classes. (Simpel Forpleining.)
	1. <i>Morning (Breakfast).</i> Patients have tea, bread and butter, with cheese, or some substitute. Attendants have coffee, bread and butter, with cheese, or some substitute.	1. <i>Morning (Breakfast).</i> Patients have tea, butter, and bread. Attendants have coffee, butter, and bread.
	2. <i>Mid-day (Dinner).</i> Roast meat and pudding. Sago soup and stockfish (klipfisk). Fresh meat with horseradish sauce, and meat soup, with rice. Fresh fish and rice pudding (risveling). Peas, salt meat, and bacon, with stewed greens or potatoes. Beef-steak and sago-pudding (sagovelling). Beer-soup (Øllebrød), herring, and pancakes.	2. <i>Mid-day (Dinner).</i> Fresh meat and meat soup. Milk broth (melkeveling, or melk-suppe) and stockfish. Fresh meat and meat soup. Fresh fish and fish soup. Peas, salt meat, and pork. "Menagesuppe" and "Lapakous." Beer-soup and herring.
Friday	3. <i>Evening (Supper).</i> Porridge (grød) and milk.	3. <i>Evening (Supper).</i> Sunday and Thursday, tea, butter, and bread. Porridge (grød) and milk.
	Tea, bread and butter, with meat, &c. <i>Afternoon Lunch† (Eftermiddag).</i> Half portion of butter, bread, and coffee. <i>Forenoon Lunch† (Mellemmiddag).</i> Half portion of butter and bread.	<i>Afternoon Lunch† (Eftermiddag).</i> Half portion of butter, bread, and coffee. <i>Forenoon Lunch† (Mellemmiddag).</i> Half portion of butter and bread.

in connection with, and in explanation of, this table, it will be necessary to give some particulars of the Norwegian or Danish dishes therein named. Comparatively full details as to the nature of these dishes, and of the proportions of materials used, will be found in one of the appendices to Dr. Sandberg's Report: "Uddrag af det fortiden gjældende Spise-reglementet Sindssygeasyet."

The ounce of solids are given per "Lod," a Danish weight equal to our ½ oz.

The measure generally used is the "Pot," a Danish measure equal to somewhat more than

a national dish, equivalent to the Scotch "porridge," or "stirabout." It is generally made of oat or barley meal, with water or milk; but it is sometimes also eaten with oil, butter, &c.

or 12 "lod" of fresh meat, freed of sinews and bones, are allowed per patient.

The "Lapakous" contains, per patient, 1 oz. meat, groats, greens, &c.: "Lapakous" contains 4 oz. of "Menagesuppe" contains groats, syrup, gravy, &c.: Fish soup (flake-suppe) contains milk, greens, &c.: Beer-soup (Øllebrød) is made of beer, milk, barley meal, and syrup, to Dr. Sandberg's Report, but of beer and grated rye-bread according to the Danish of Ferrall and Repp. Gryngrød, or Gryne-grød, according to the Dictionary, is simply oat, milk or beer, and sugar. "Byggryn" is barley-groats: "Byg-suppe" is barley-klipfisk" is common saltfish, or stockfish.

The patients of the higher ranks have potatoes at certain times in addition to, or in lieu of vegetables; but the potato appears to be a comparatively scarce vegetable in Norway. It is also refined sugar to some of their dishes, e.g., to coffee, instead of raw or coarse cream instead of milk.

"Øllebrød" or butter and bread, consists of 12 lods of rye bread, or 6 of wheaten bread of former and 4 of latter, with 2 lods of butter. On Sundays, festival days, and on occasions, there is an addition of cheese with other extras.

"Risveling" contains rice, milk, eggs, coarse sugar, raisins, butter, potato-peel, &c. The "Sago-suppe" consists of sago, cherries, raisins, coarse sugar, &c. are made of wheat flour, butter, milk, eggs, and refined sugar; sauce for roast meat, of wheat flour; and horseradish sauce, of horseradish, wheat flour, butter, coarse sugar, &c. The supplementary meals, only given to the workers and such other patients as the superintendent prescribes them for.

express my belief that, though the printed regulations of Gaus Asylum contain clauses to the above effect, they are not, to full extent, acted upon; for I presume, in regard to the imposition of restraint or seclusion, Dr. Sandberg possesses and exercises a humane and wise discretion. I quote from the Regulations of the Asylum the clauses to which I refer, as the testimony of Norwegian psychologists on the subject of compulsory work, and the punishment of the indolent and refractory:—

“Enhver Syg maa beredvilligen deltage i de Arbeider, som Asylet hans eget Bedste fordrer af ham, være sig paa Marken, i Haven eller i Byen, og i alle de Anlæggene, hvor det maatte ansees hensigtsmæssigt.”

“Uvillige og gjensidige Syge ville paalægges Bestyrelsen i tunge Pligter at anvende Tvangsstrøi, Indespærring i Eneværelse,” &

“Men disse Tvangsmidlers Anvendelse skal være saa kortvarig lempelig som muligt.”*

But, though compelled to work, the patients are not compelled to work for nothing. The superintendent possesses the power at his discretion, of giving rewards to the industrious, either in the form of small necessities or gifts, or as sums of money when the patient leaves the institution. The placing to the credit of patients of the value of their labour; the laying up of the earnings during their residence, as it were, in a savings-bank, and the handing over to them, directly or indirectly, on their leaving, of the accumulated sum, or the balance thereof—for it is but fair that the patient should defray, in whole or in part, the cost of his maintenance and treatment—seem to me to constitute an admirable arrangement. The poor artisan or labourer is thus provided with a sum sufficient to start him afresh and satisfactorily in the world, or to keep him comfortably until he succeeds in obtaining suitable employment. This principle is acknowledged in the Reserve Funds of some English asylums, from which grants of money are made to deserving cases on their leaving the asylum to resume the struggle of life. But it is a principle which should be uniformly acted upon; if it is good in one asylum, it is equally good in another. It is, indeed, a development of the principle of life insurance, and a development to which I would urgently direct the attention of the authorities of our lunatic asylums. Such a provision would lessen the pangs of confinement to many an industrious tradesman, and would experience great satisfaction in the assurance that he is supporting himself, or largely contributing to his own support, burdened neither upon friends nor parish. Removal from an asylum is frequently a curse instead of a blessing; it is a step from comparative affluence, ease, and comfort, to misery and beggary; every superintendent of an asylum can readily recall to memory

* “Midlertidigt Reglement for Gaustad Sindssyge-asyl,” p. 5, sect. vii.

illustrations and cases corroborative of this statement. I know no more worthy object of the charity of the rich than such reserve funds attached to our large public asylums. It may appear hard and unjust to compel patients to work; but, that compulsory work—where, of course, voluntary work cannot be substituted—in the case of pauper patients is generally a direct benefit to patient and asylum alike, I have no hesitation in asserting. I had occasion to try the experiment lately. Four powerful men in the prime of life—all cases either of acute or paroxysmal mania, and all both destructive and violent—had for a considerable period caused much trouble and expense by breaking windows, tearing up clothes, and destroying the walks and walls of the airing courts. An attendant was engaged specially to superintend these men, who had a court allocated to themselves for exercise. Still the violence and destructiveness continued; no kind of dresses was found strong enough to resist their mischievous propensities; one man tore up, with apparent ease, the stoutest canvas and moleskin, as well as locked boots. I now resolved to direct their physical force into some useful channel, and I accordingly set the four men, under charge of their attendant, to pump-work. They were engaged in this hard, but regular, mechanical employment from 9 A.M. till $\frac{1}{2}$ past 12; and again from 2 to 4 or 5 P.M. daily. The result was almost immediate and satisfactory, consisting in comparative quietude, good behaviour, improved sleep and appetite. The experiment continues to work well after an interval of several months. In such cases, independently of the good done to the patients, I doubt not that the asylum would ultimately be no loser, inasmuch as against the wages and keep of an attendant are to be placed, as per contract, the enormous amount and considerable value of clothes destroyed and windows broken. The kind of work engaged in by the patients of Gaustad appears to be chiefly the following:—Cutting firewood, felling trees, gathering or teasing hair, household work, field and agricultural work, shoemaking, carpentry, mason work, bookkeeping, wool work,—gathering, carding, and spinning of wool, stocking-knitting, and needlework. While the men are chiefly employed in out-door labour, field and garden work, cutting timber and splitting firewood, or in in-door handicrafts, the females are engaged in cooking, household work, wool work, needlework—in making or mending stockings, shirts, jackets, trowsers, coats, petticoats, night-dresses, under-clothing, handkerchiefs, window-blinds, &c. More women seem engaged in wool work than in any other single department of female handicraft—upwards of ten daily—while only four are occupied in household work, and three in sewing. The quantity of work done by the females may be estimated by the following list:—

15 Pairs men's boots.	127 Men's shirts.	30 Coe
74 Pairs women's boots.	60 Chemises.	84 Nig
66 Pairs men's shoes.	48 Pairs trousers.	18 Nig
12 Pairs women's shoes.	20 Jackets.	109 Wi
207 Pairs stockings.	39 Petticoats.	121 Ha

The women would thus appear to do a considerable tailoring. Full statistical tables are given in Dr. Report, the accuracy of which is vouched for by a "Commission," consisting of three persons, who act as accounts. The males are chiefly employed felling cutting it up into battens, or firewood: a large birch, pine, and other woods has thus been hewn a during the year. This is no more than we should timber-producing country like Norway. Agricultural work stands next in order of importance; the spring seasons appear to be by far the busiest to this sector workers. I saw many patients engaged in reclaim lands and laying out airing courts, for the grounds be the asylum are as yet in a comparatively wild and u state. Shoemaking is an important handicraft: in t ment the patients have the benefit of the supervision maker and his apprentices. Carpentry is a sister tra importance; all the garden and agricultural implement and repaired in the carpenter's shop, and all the ordi jobbing done by the wrights or joiners. A few of the engaged in special occupations: one man, during m painting the walls of some of the parlours and cor tastefully. In connexion with the hours of labour, mention that the patients go to bed at half-past ni summer, and at half-past eight in winter—rather lat cases, than in most British asylums, where a common complaint is the hardship of being compelled to go summer by daylight (*e.g.*, at eight P.M.).

I must now approach, with all due caution and respect which is in great measure tabooed or passed over silence in most of our British Asylum Reports—I mean of restraint and seclusion. In a table appended Sandberg's Report, we find a description of the nature of restraint and seclusion employed in the Christiania State Asylum, their duration, and the necessity or causes for their employment.

- * "Extract af Gaustad Sindssyge-asyls Behandlingsprotokol for .
- 1. Symptoms, or conditions, on account of which restraint was necessary (*sygdoms-symptom som har foranlediget Tvangs Anvendelse*).
- 2. Number of times on which restraint was had recourse to (*antal Syge have været underkastede Tvang*).
- 3. Form of restraint (*Tvangsmidlets Beshaffenhed*).
- 4. Average duration of restraint (*gjennemsnitstid hvori Tvang er forøkkjellige Tilfælde*).

It is at least manly and frank to publish openly such a statement; it shows unmistakably that the Norwegians are not victims to the hobby that all restraint—it matters not in what circumstances—is cruel, mischievous, and unnecessary. There are, perhaps, not many asylum superintendents in this country who, in the face of this well-known amiable and philanthropic, but withal crotchety, idea regarding the utter inadmissibility of the procedure or mode of treatment which is designated by that objectionable and ugly term *restraint*, would venture to publish such tables, or to defend their bold and independent practice. A reaction, however, appears slowly but surely to be taking place among those best conversant with the subject—among practical men, asylum superintendents—who begin to see the absurdity and fallacy of the supposed distinction between mechanical and personal restraint, and who find that cases will occur, notwithstanding the authority of certain very distinguished psychologists, necessitating some form of mechanical restraint, and, finding this, they act according to their convictions. It is surely monstrously absurd to call the application of a glove or belt “mechanical restraint,” and to frown at seclusion as something horrible; while restraint by two or three attendants, who cannot possibly be expected to do more than human nature can—keep their tempers, under every amount and kind of irritation or provocation,—a restraint which implies, as every superintendent full well knows, black eyes, broken ribs, the most bitter antipathies, the most deadly struggles, the most inordinate excitement,—is denominated “moral suasion,” or is called some equally pretty name! There can be no doubt, I think, that restraint by persons is in many cases infinitely worse than restraint by things; and I must confess that a suspicion attaches, in my own mind, to any system or any asylum professing to have no recourse whatever to “restraint.” Undoubtedly, in all asylums it will be found in some form, so long as insanity and human nature remain what they are; or it will be supplanted by some equivalent mode of treatment. I have tried this system of supplying numerous attendants to destructive and violent patients, and I have frequently found it wanting. A superintendent must, of course, take attendants as they are, not as they ought to be. But, lest I should be misunderstood, it is necessary to state here that I have never had recourse to mechanical restraint in the sense in which the term is generally understood. Nevertheless, I can conceive cases to occur requiring it; and I should certainly not be deterred, if they did occur in my practice, by any dogmas or dominant ideas on the subject of non-restraint, from treating such cases by mechanical or personal restraint, or otherwise, as I should see fit. The replies

of the English and Irish superintendents, to the Commissioners of their respective countries, on this subject, manly and independent; but they show a remarkable uniformity of opinion between the governing body, the theorists, the governed, the practical men. I do not indulge in the discussion with a view to defend the use, in the Christiania State Asylum, of restraint or seclusion—far from it; for I am not in a position to say whether the restraint imposed was necessary at all, or whether it was of a proper kind and duration. I saw, on my last visit, only one person under restraint, and that merely to the arms, so as to prevent any injury to a dislocated shoulder-joint, which had been set on the previous day. The general impression produced on my mind by what I saw, was that the superintendent was a most humane, judicious, and moral physician, who might safely be entrusted with the physical, moral, as well as medical, treatment of his patients. The reasons, or conditions, on account of which restraint was employed in Gaustad, were the following:—Violence (*volitsomhet*), brutality (*brutalitet*), obstinacy (*opsættighed*), impertinence (*uopavsættelighet*), destructive tendency (*ødelæggelsestend*), dirty habits (*usædelighet*), self-mutilation (*selvbeskadigelse*), suicidal attempts (*forsøg*), fugitive tendency (*undvigningsstend*), onanism and restlessness (*uro*).^{*} The forms of seclusion employed are—Seclusion (*indespærring*), the restraint-vest or camisole (*tvangstrøje*), the restraint-cape (*tvangssatol*), and the handcuffs (*haandbøjler*). The use of restraint varies greatly; some patients were secluded or restrained day and night, others by night only; some for sixteen hours a day, others for fifty-five consecutive nights. The restraint was worn from one to fifteen days and nights (I give round numbers only), and "the chair" was occupied for from sixteen hours a day to fifteen days and nights. It certainly would appear as if the same had fallen on the Christiania State Asylum in Norway, of restraint and seclusion; but I have already said enough, to indicate that the superintendent and the directors were not prejudiced hastily or harshly in regard to this department of management or management. Dr. Sæviq himself declares that he expects restraint and seclusion to be gradually less and less employed as the staff of attendants is increased, and as amply as are set before new-comers by patients long in the asylum. Such a declaration tends to show that he regards restraint and seclusion as mitigable evils, and that he intends to reduce them to a minimum amount or degree.

I come now to speak of the medical treatment of the

^{*} I give the Norwegian words, lest they should not be fully or correctly represented by my translation or interpretation thereof.

As the causes of insanity are psychical and physical, so does Dr. Sandberg divide the treatment into psychical and physical. He has evidently great confidence in the virtues of change of scene, removal from sources of irritation, abundance of fresh air, out-of-door exercise and occupation, fine view, good keep, and regular habits. But he has great faith, in addition, in bathing, as well as in opium, belladonna, digitalis, hyoscyamus, and other drugs. Opium appears to be his sheet-anchor in melancholia, where the circulation is languid, with a dry bluish skin, and rigid muscles. He uses it further in what many will be inclined to regard as heroic doses: he begins with 1 grain morning and evening, and goes up to 8 grains twice a day; not, however, in any case exceeding the latter dose. Sometimes he gives a grain every fourth, eighth, or tenth day only. Males are opiated more fully than females, taking sometimes 4 to 8 grains twice per day, or on an average 2 to 7 grains morning and evening; while females begin at 1 grain, and gradually go up to 7, the average being 5 grains. Doses such as this were given in 24 cases—11 males and 13 females. No dangerous effects ever accrued, though headaches, nausea, and vomiting are specified as among the accidental effects of opium in individuals who appeared peculiarly susceptible to its action. The question of the tolerance by the system of opium in cases of mental disease, or in various severe physical diseases, was recently agitated in connexion with the death of Mr. Augustus Stafford, M.P.; and on other occasions, also, most curious and surprising evidence has been collected of the large quantities of opium, in some of its forms, that can be borne under certain circumstances of idiosyncrasy or disease. In many cases of mania, for example, ordinary doses of opium or of laudanum produce no effect. Several grains of opium or drachms of laudanum may be given with impunity; and persons become so habituated to its use, and so unsusceptible of its influence, that they can drink laudanum by the ounce, or even pint, as they would drink beer or wine! As adjuncts to opium, Dr. Sandberg uses, in some cases, the cold shower-bath or the warm-bath; the latter where the skin is cold or bluish. I cite a single and ordinary case of melancholia, as illustrative of the opium plan of treatment. It had been treated with infusion of digitalis, extract of stramonium, and subsequently 5 grains of opium daily, prior to admission. On 9th of July, the patient began to take opium in doses of 1 grain morning and evening; on 19th, the dose was increased to 2 grains twice a day; on 29th, to 3 grains; on August 7, to 5 grains; on 12th, an emetic powder; on 13th, continue opium, 5 grains, morning and evening; on 16th, 6 grains; on 28th, reduce to 5 grains; on September 7th, 4 grains; on October 1st, 3 grains; and on the 13th, discontinue the opium. Here is a patient

taking opium for three months, almost daily, sometimes of 12 grains per day—a mode of treatment of doubtful use in such a case. Instead of opium itself, morphia was used; recently the alkaloid itself, not its salts—in some 17 cases, and 10 females. This is exclusive of cases in which it was as an ordinary and mere soporific. The average dose commenced was $\frac{1}{4}$ grain morning and evening; subsided three times a day; and it was gradually increased to $\frac{1}{2}$ grain three times a day. Prolonged warm-baths, with a stream of cold water on the head, appear to stand in the same relation to morphia as opium does to melancholia, in the Gaustad Asylum. This is precisely that now carried out successfully, and on a large scale, at the Royal Edinburgh Asylum, and other British asylums: the body of the patient, with the exception of the head, is immersed in warm water for some hours, while a stream of cold water constantly trickles over the head from a pipe suspended over it. This plan was had recourse to in 27 patients, 17 males and 10 females. It would appear from these statistics that the most severe cases of melancholia occurred chiefly among males; and severe cases of mania were found chiefly among males. The duration of the bath system varied from one to eight hours a day, and consecutively; and as an adjuvant—a calmative, an emetic alone, or in conjunction with extract. belladonna, was sometimes employed. Seclusion in a darkened chamber was also commonly resorted to in acute maniacal cases. The forms of hydropathic treatment seem common in insanity in Norway, both within and without the Gaustad Asylum. I find cases of stupor (the acute dementia of some authors), of melancholia, with stupor, of others) and of dementia treated by warm or tepid-bath, and with the “*Regndusch*” and “*Bergerdusch*,”* in the open air. In addition to the medicinal appliances I have named, Bavarian beer as a tonic; infusion of opium as a sedative or calmative of the heart’s action, when it is too excited; decoct. rhamni frang., ol. ricini, potass. bitart., flor. st. as an emetic; infus. valerian., and various other drugs, appear to have a prominent place in the asylum pharmacopœia. Sulphate of iron was used in 4 males—cases of maniacal paroxysm; digitalis, with or without nitre, in 3 males and 1 female; quinine and chinæ acidum, in 2 males and 1 female; camphor, in 2 males and 3 females, cases of erotomania, in doses of 1 to 4 grains three times a day. As tonics and emmenagogues, pills of rhubarb ext. conü, pil. tonico-nervin, tinct. mur. ferri, infus. rheor. were employed; and, in other special indications, atropin. rad. artemisiæ vulg. solut., saccharated iodide of iron, &c.

* The Norwegian “*tvangsdusch*” seems to be our old douche pot used more for purposes of punishment and terror than as a tonic!

potassium, electuar. anthelmint., emulsio assafoet., liquor antispasmodic, &c. Derivation by purgation was effected by decoct. rhamni frang., solut. salis anglici, ext. rhei comp., &c. Counter-irritation was applied in the form of antimonial (tartar emetic) ointment (*stibiatsalve*) and of vesicatives to head or nape of neck. The spontaneous derivation or counter-irritation effected by boils and carbuncles was sometimes most salutary. A great portion of Dr. Sandberg's valuable Report consists of most interesting details of individual cases of the various forms of insanity, according to the classification, which he recognises, with their symptomatology, pathology, and treatment; but for these I must refer the reader to the Report itself.*

Of a far different character, in regard, at least, to site, construction, and general arrangements, is the Christiania City Asylum at *Mangelsgaarden*, buried as it is in one of the town thoroughfares. I was accompanied in my visit both by the consulting and resident physicians, Drs. Winge and Kaiser; but I take the information I have to give regarding it chiefly from a most interesting pamphlet by the former gentleman,—a reprint from the "Norwegian Journal of Medicine,"—which pamphlet consists, in great measure, of a series of cases, with commentaries as to the psychical phenomena and medical treatment.† Like the *Gaustad* Asylum, this institution appears to date from the law of the *Storthing* regarding lunacy and lunatic asylums, dated 17th August, 1848: a law and a date which seem to have constituted an era in the history of insanity and asylums in Norway. From this law will undoubtedly date still further changes in the number and character of Norwegian asylums. So soon as the cautious and shrewd Norwegians see the practical working of the present expensively constructed and organized State Asylum, and thereby

* I would strongly advise all intending medical visitors to Norway and its asylums to "rub up" their German or French if they are not acquainted with Norwegian. I found many of the best-educated classes in Norway—professors in the University, and the merchants and citizens of Christiania—ignorant of the English language. German is the foreign language chiefly spoken by the educated Norwegians; next to it stands French; while English is only beginning to be generally cultivated as a language. Dr. Sandberg, for instance, does not speak English; but he spoke to me fluently in German. Dr. Winge, Physician-in-Chief, and Dr. Kaiser, Assistant or Resident Physician of the Christiania City Asylum, however, both speak English comparatively well, especially the latter. To thoroughly enjoy and appreciate a tour in Norway, and to derive material advantage therefrom, it is extremely advisable, if not absolutely necessary, that the traveller should know something of either the Norwegian or Danish languages. The latter is comparatively easy of acquisition, and there is no difficulty in procuring grammars, dictionaries, and other linguistic aids. If he do not do this, his tour will either be a series of misadventures and disagreeables, or he must place himself in the hands of guides or couriers—both an expensive and irksome procedure.

† "Beretning om Christiania Sindssyge-asyls Virksomhed i Aarene 1850—1856. Af P. Winge, Overlæge. (Copie af Norsk Magazin for Lægevidenskabene.) Christiania. 1857."

discover its demerits as well as recognise its merits, others on a smaller and less pretentious scale, will probably be built in different parts of the country. For if the necessity for numerous small district asylums is keenly felt in Scotland, which is comparatively well furnished with water, if not land, conveyance, it must be felt still more seriously in a primitive country like Norway, where land conveyance, in particular, is extremely slow and imperfect.

The Christiania City Asylum resembles externally some of our older Scotch poor-houses. It is separated from the public road or street only by a dingy court, with an appearance not at all prepossessing. Nor are the internal architectural arrangements specially commendable. The most, however, has evidently been made, by the intelligent physicians, of the accommodation and materials at their disposal; the general principles of management or treatment being precisely those to be found in operation at Gaustad, and which I have already detailed. The building was originally a custom-house or poor-house, or was devoted to some such public use: it was partly converted into an asylum in 1849, and entirely so in 1851. It accommodates only 60 patients, 30 of either sex. It is intended mainly for paupers; but private patients are admissible if there is room, and the cases are considered otherwise suitable. All the larger or principal rooms look to the south and east; but there is no view, so far as I remember, from any of the lower windows—at least, except brick walls and blocks of houses! The rooms, of whatever size, have a height of 5 ells—that is, 10 feet, the Norwegian ell being equal to about 2 feet English. There is on the male side of the house a wing or department for the quiet and cleanly, and another for the violent and dirty. A similar arrangement exists on the female side; but the building does not pretend to symmetry, nor to architectural facilities for classification. The male wing for the quiet and cleanly contains a large parlour (*forsamlingsstærelse*); a large dormitory (*sovesal*), fitted up with 11 or 12 beds, and a smaller one with 7 or 8 beds; a dining-room (*spisestue*); and workshop for carpentry, turning, basketmaking, shoemaking, and other useful handicrafts. The male wing for the violent and dirty contains 8 bed-rooms, each 8 ells deep, or 16 feet, 5 ells broad and 5 high. In some of them the windows are guarded by a row of palisades, at a distance of $1\frac{1}{2}$ ells, or 3 feet. Those rooms struck me as being dark, damp, and dingy; and the same objectionable arrangement exists as at Gaustad in regard to night stools in a corner of the room. They are furnished, as are also the bath-rooms, with floors of asphalte about $\frac{1}{2}$ inch deep. The male side of the house also possesses attendants-rooms, ward-robe-rooms or store-rooms for clothes, and bath-rooms, with ante-

chambers for dressing and undressing, and other conveniences. The bath-rooms are very neatly and comfortably furnished, and fitted up with plunge and shower-baths; but they are inconveniently small and dark. The water-closets likewise possess the latter objection. The corridors are narrow and dark, the single rooms small and cell-like; the airing courts contracted and gloomy, with little vegetation; and altogether there is a poor-house aspect and feeling about the place. These, however, are all faults inseparable from the reconstruction or adaptation of an old-fashioned house, and for which the medical officers are nowise responsible.

The female wing for the quiet and cleanly has a large association-room (*forsamlingsaal*), where the patients busy themselves in needlework and other suitable occupations during the day; a large dormitory (*sovesal*) with 14, and another with 10 beds; and a roomy kitchen, which serves also as a dining-parlour. The use thus made of the kitchen has the advantage that the patients themselves superintend the cooking of their meals, and the washing and placing of their dishes; and hence, an arrangement that has undoubtedly been necessitated by want of room, is really productive of the best results, in so far as homely habits are engendered and profitable occupations taught. The kitchen, however, is sunk a few feet below the ground, and the entrance is by sunk steps. This is a bad arrangement, and is only defensible on the score of the age of the building and its originally bad construction. The female department for the violent and dirty contains 6 commodious single rooms,—I detest the word “cells,” although the Norwegians themselves employ the term “*celle-rærelser*,”—lighted from the roof (by skylights), with rooms for attendants, and wardrobe-rooms, as on the male side. The whole establishment is lighted with gas, and seems sufficiently well supplied with water. From the small size of the whole building, and the compactness of the rooms, the inmates have much of a family character in their habits and occupations. Indeed, such an arrangement is a comparatively close approximation to the colony system of Gheel,—the cottage mode of treatment of some English and Scotch asylums. It is doubtful, without actual experiment, to what extent this system of treatment can be carried out in this country, modified, as it necessarily would be, according to the class and kind of patients, the rates of board, the site of the colony, and its proximity to towns. But I am firmly of opinion that the principle on which such system is based is the proper one, though I must own to seeing many obstacles in the way of having it practically carried out at present in this country. One great obstacle is, at the outstart, its expensiveness; and this is a terrible bugbear and barrier to progress in the eyes

of ratepayers; there is little prospect, therefore, of any such plan being voluntarily carried out extensively or fairly in pure pauper asylums. Economy is in favour of large and compact asylums, which are said, or supposed, to be the cheapest means of providing, according to Government regulations, for the insane. Humanity and science recommend small asylums, as certainly affording the best chances of cure and comfort; and on the Lunacy Commissioners is forced the difficult and delicate task of reconciling parties holding such opposite views, and of indicating some middle course satisfactory to both.

The staff of this asylum appears lamentably meagre. On the male side, there are a head-attendant and 2 ordinary attendants and on the female side, a matron and 2 female attendants. The following Table shows the statistics of the institution in regard to the admissions and discharges during the six years preceding 1857:—

Table showing the Admissions and Discharges in the Christiania City Asylum (at Mangelsgaarden), between 1850 and 1856.

Year.	Admissions.		Discharges.							
			Cured.		Improved.		Unimproved.		Dead.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Remainin ^g in 1849	22	—	—	—	—	—	—	—	—	—
Admitted in 1850	33	5	13	2	5	—	5	1	4	—
„ 1851	27	20	10	2	7	1	4	—	6	—
„ 1852	20	27	6	7	3	3	4	4	6	3
„ 1853	29	21	10	11	5	4	4	4	5	4
„ 1854	12	20	7	5	2	3	3	5	4	5
„ 1855	12	18	3	11	2	3	7	3	1	3
„ 1856	14	16	4	8	1	5	3	2	3	4
Total	169	127	53	46	25	19	30	19	29	18

Remained under treatment at close of year 1856, 57 patients—
32 men and 25 women.

Of the total number of 296 patients under treatment between 1850 and 1856, there were—

Cured	99, or about 33½ per cent.
Improved	44, „ 17 „
Unimproved	49, „ 17 „
Dead	47, „ 17 „

The dietary regulations, like those of Gaustad, are sanctioned by the “Control Commission,” or Lunacy Board; but they differ somewhat from those of that asylum in detail. I have presented them in a tabular form. For full diet, a charge of 17 skillings made for each patient per day—that is, about 8½d. English.

Table showing the Dietary Regulations in the Christiania City Asylum (*Mengdebestemmelser*).

Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
1. <i>Morning (Breakfast).</i>						
$\frac{1}{2}$ quart tea, $\frac{1}{2}$ oz. sugar, $\frac{1}{2}$ lb. bread, and $\frac{1}{2}$ oz. butter.	As on Sunday.	As on Sunday.	As on Sunday.	As on Sunday.	As on Sunday.	As on Sunday.
2. <i>Mid-day (Dinner).</i>						
1 quart meat soup, with peas, groats, and potatoes; 4 oz. salt beef, and $\frac{1}{2}$ lb. bread: or 1 quart meat soup, with groats or vegetables; 4 oz. fresh beef, and $\frac{1}{2}$ lb. bread.	1 quart \ddot{o} llebröd, 1 pint lapakous, and $\frac{1}{2}$ lb. bread.	1 quart meat soup, with groats and vegetables; 4 oz. fresh beef, and $\frac{1}{2}$ lb. bread.	1 quart gryn-gröd and 1 pint sweet beer: or $\frac{3}{4}$ quart milk, $\frac{1}{2}$ lb. bread, and $\frac{1}{2}$ oz. butter.	As on Tuesday.	1 quart milk broth, with barley groats; 1 portion salt fish or fresh fish, and $\frac{1}{2}$ lb. bread.†	1 quart \ddot{o} llebröd, and either 1 pint lapakous and $\frac{1}{2}$ lb. bread, or $\frac{1}{2}$ lb. bread, $\frac{1}{2}$ oz. butter, and 1 portion salt herring.
3. <i>Afternoon Lunch (Eftermiddag).</i>						
$\frac{1}{2}$ lb. bread and butter.	As on Sunday.	As on Sunday.	As on Sunday.	As on Sunday.	As on Sunday.	As on Sunday.
4. <i>Evening (Supper).</i>						
$\frac{1}{2}$ lb. bread, $\frac{1}{2}$ oz. butter, and 1 pint beer.	$\frac{1}{2}$ quart gryn-gröd and 1 pint beer, with $\frac{1}{2}$ oz. sugar and $\frac{1}{2}$ quart milk: or, in option of Superintendent, an allowance of butter and bread, or milk and bread.	As on Monday.	As on Sunday.	As on Monday.	As on Monday.	As on Monday.

For explanation of the terms used in the foregoing Table, and of the composition of the dishes, &c., see Table of the Dietary in the State Asylum at Gaustad, p. 269 of this paper.

* Milk, barley-broth (byg-suppe), white bread, and tobacco, are regarded as luxuries or extras, for which an additional charge is made.

† To fish diet on Fridays, potatoes if in stock; in which case, the allowance of bread is diminished to one-half.

Relapses occurred once in 16 cases, twice in 3. They happened in 2 cases after an interval of 2 months subsequent discharge; in 2 after 6 months; in 1 after 7 months; and in 2 after 10 months; while, in the remainder, the interval was from 1 to years after apparent recovery and discharge from the asylum.

Here, as at Gaustad, the importance of occupation is fully recognised, and a large proportion of the patients is engaged in useful labour. The kinds of work chiefly engaged in are as follows:—Basket-work and wicker-work (*kurv-binderarbeide*), carpentry or joiners' work (*snedkerarbeide*), tailor-work (*skredderarbeide*), shoemaking (*skomagerarbeide*), glove-making (*handskemagerarbeide*), wool-teasing, &c. (*uldplukning*), carding and spinning wool (*karding og spinning*), knitting and ribbon-weaving (*strikning og baandvæving*), sewing (*søm*), and household-work &c. (*hustjeneste og udvendigt arbejde*). Dr. Winge does not hesitate to allow the use of restraint and seclusion, with a view to prevent patients hurting either themselves or others, or destroying the property of the asylum. Not only is the strait-jacket used as a means of treatment, but seclusion, with or without the cold shower-bath, is resorted to as a means of correction or punishment. I quote the paragraph in Dr. Winge's pamphlet relating to restraint and punishment, as one of some importance, showing the different light in which both are regarded in Norway, as compared with this country:—

"Hvad Tvangsmidlernes Beskaffenhed og Anvendelse angaar, indskrænkes Brugen af dem til at den Syge, saavidt muligt, hindres i at tilføie sig selv, andre Personer, eller Asylets Eiendom nogen Skade. De bestaae i Afsondring i Eneværelse og Anvendelse af Tvangsmidler. Som Correctionsmiddel anvendes undertiden Eneværelse, undertiden og i Almindelighed da med udmærket Virkning, et koldt Styrtebad."

In the same pamphlet, Dr. Winge divides mental diseases in the following classes:—

- A. Those induced by, or depending upon, a primary derangement of the nervous system:—
 - a. Depending on a primary lesion of brain. (p. 12.)
 - b. Depending on a primary lesion of spinal cord. (p. 32.)
 - c. Depending on a primary lesion of eccentric nerve-system. (p. 39.)
- B. Those induced by, or depending upon, a primary derangement of the circulation or blood. (p. 43.)
- C. Those induced by, or depending upon, a primary derangement of the sexual system. (p. 50.)
- D. Those induced by, or depending upon, a primary derangement of the digestive apparatus. (p. 63.)

* "Beretning om Christiania Sindssygeasyls Virksomhed i Aarene 1850-1856," p. 8.

section at the end of Dr. Winge's paper is devoted to the al treatment of the cases in the Christiania City Asylum. is evidently great faith in medicinal treatment; and he uses powerful remedies with no sparing hand. From *opium* he frequently seen the most rapid and remarkable effects, when in large doses. He considers it as indicated in cases of cerebral irritation, or inordinate nervous excitement, or precordial pains, sleeplessness, and other distressing symptoms. It is sometimes used in the form of powder, with in one or several doses per day. He generally begins 1-3 grains morning and evening, increasing the dose by 1 every fourth or fifth day, until it reaches 6-8 grains, or 14 grains, when it is gradually diminished every third or 4 day, until the patient is again taking only 1 grain at a

He declares the fear to be a groundless one, that consumption, poisoning, &c., will infallibly follow such large doses of *opium*. He has seen vomiting induced by medium doses—4 grains; but this symptom has disappeared on increasing or diminishing the dose, according to circumstances. He has never any subsequent dangerous depression attributable to *opium*, given cautiously, and in small doses, if at all, where there is rigidity of system, a tendency to stagnation in the portal system, disease of heart, chest, or abdomen, or symptoms of cerebral paralysis. It is sometimes combined with iron, quinine, or other tonics. Dr. Winge does not regard cerebral congestion or mental depression as contra-indications; for he has seen the best benefit from its use in both these cases. Instead of large doses of *opium*, where stronger narcotism is contra-indicated—where depression exists with hypochondria and weakness—*acetate of morphia* is sometimes used, either in the form of pills in doses of $\frac{1}{4}$ to 1 grain, or 2 or 3 times a day in smaller quantities. In cases of organic disease of the heart, or of increased multiviscous action thereof, especially where a sub-inflammatory irritative process is supposed to be going on in the meninges, *digitalis* is given. The form of administration is *acetum digitalis*, in doses of 10-30 drops, 3 or 4 times a day; or as infusion (gr. \mathfrak{ss} . to \mathfrak{z} viij.), 1 tablespoonful every 2, 3, or 4 hours. Infusion of *digitalis* with borax is also recommended as a good emmenagogue. *Stramonium* has been used in some cases to reduce a rapid pulse, to diminish increased action of the heart, or to subdue cardiac action:—gr. i., dissolved in \mathfrak{ss} il. aq. fl. naphæ, of which 3-8 drops were given 3 or 4 times a day. Dr. Winge's experience of this remedy is, he says, too limited to enable him to give any definite opinion as to its merits. *Stramonium* has been used with success in cases of hallucination of hearing, either in the form of pill—2-10 gr. of extract. *stramonii* per day, in one dose

at bedtime, or in smaller quantities morning and evening,—or in that of solution in water. Under its use, Dr. Winge has seven times seen dilatation of the pupil and impairment of vision. *Haschisch*, or extract. *cannabis indicæ*, is frequently used in melancholia accompanied by stupor, or an adynamic state of system. It is given in small doses—gr. $\frac{1}{2}$ –2, once or twice a day, and always in the form of pill, on account of its taste. Its effect is generally most exhilarating and enlivening. Oxide of zinc (*flores zinci*) is occasionally used in convulsive affection with or without small doses of opium. *Valerianate of zinc* has been employed in acute cases, where nervous phenomena were prominent, and the patient was noisy and excited. After its use opium has sometimes been found more efficacious. The difficult subject of *bleeding* in insanity is slightly touched upon. It has been resorted to in a few exceptional cases; and a moderate bleeding is stated to be useful in incipient meningitis, when there is absolute plethora, or an engorgement of the vessels of the brain. Cases therefore occur in which it is decidedly indicated. But it is not generally recommended; on the contrary, Dr. Winge denounces it as usually most hurtful—often inducing collapse, or an incurable form of insanity. For producing derivation of blood from the head, and to promote menstruation *Juno's boot* is spoken of in a commendatory way. Dr. Winge has never seen secondary cerebral congestion, or dangerous action—cerebral or local—result from its use. It is usually applied to one limb at a time; so that if it be placed on the right leg or arm to-day, it is applied to the left to-morrow; or it may be applied on the same day, for a short time, first to the one limb and then to the other. Sometimes, however, it was borne so well by the patient, that it could be applied to both extremities at once. *Warm* and *tepid* baths are commended as not only in themselves good, tending to produce sleep, subdue erethism, and restore and increase the action of the skin, but as most useful in assisting the action of medicinal remedies. The *prolonged warm bath, with cold douche to the head*, is likewise extensively employed, after the manner of Gaustad. Many of the foreign remedies, medicinal or otherwise, have been tried experimentally only, and for comparatively short periods; but their bare enumeration suffices to indicate the enterprising and enlightened spirit which guides the practice of the psychologists of Norway.

Let us now briefly glance at the lunacy laws of Norway, the Government machinery for the treatment of the insane and the regulation of asylums; and thereafter let us consider the statistics of insanity in Norway, according to the census of 1845, with a view specially to ascertain the extent to which proper accommoda-

dation—that is, public asylum accommodation—has been provided for her insane population. The law of the Storting—which is also the imperial law, having received the imperial fiat or imprimatur—relating to lunacy, is a modest 4^{to} pamphlet of some five pages, bearing the signature of Oscar, King of Norway and Sweden, and dated at Malmö, 17th August, 1848.* It consists of but five short, concise chapters, divided into twenty-one sections. The preamble narrates that “Vi Oscar af Guds Raade Konge til Norge og Sverige, de Gothers og Venders,” proclaim by these presents that we have had laid before us the statute or decree of the Storting,† of the 11th of July of this year (1848); and the Royal proclamation winds up by adopting and confirming, like as we do hereby adopt and confirm, this statute or decree henceforth as the law of the land. The first chapter is devoted to the subject of the regulations anent the construction and management of asylums (*om Sindsygeasylers Oprettelse og Bestyrelse*). There are eight sections, which I cannot, of course, here embody at full length,—nor is this necessary. Section 1 provides that all asylums must be authorized by Royal sanction; and, with a view hereto, it requires that there should be submitted to Government full plans of the buildings and grounds of all proposed asylums, with estimates thereanent. The petitioners must exhibit the details of their scheme of management, including, for instance, the list of officers, and their proportion to the number of patients; the pauper dietary, the industrial resources, the means of social recreation, of classification, of restraint, the provisions for cleanliness, &c. It enacts that an asylum must have no connexion with other institutions of any kind, that the site must be salubrious, the provision for occupation and exercise abundant, and that there shall be a due separation of the sexes, and a proper classification of the patients, according to the phase or form of insanity or otherwise. Section 2 relates to the licensing or authorization of private asylums. Section 3 refers to the medical officers of asylums, who must be duly qualified by law. Section 4 admonishes to social harmony in asylums, and advises constant employment; recommends that the application of seclusion and mechanical restraint should be as seldom as possible—only when absolutely necessary; enacts that there shall be no corporal punishment (*legemlig Revselse ses ikke finde Sted*). Section 5 enacts that in every asylum be kept a “Personal Protocol,” or register of patients, which will

* “Lov om Sindsyges Behandling og Forpleining.”

† The “Storting,” or Norwegian Parliament, meets every three years; it consists of the “Lagthing,” or Upper House, and the “Oddething,” or Common House. Measures passed by it require the Royal sanction before they can become law, unless they pass through both divisions of the house in three successive Storthings.

contain the full names of each patient, with his or her age, place, and occupation, as well as the name of the party at instance or request he or she was admitted; and a "Behandlings-Protocol," or register of treatment, which shall contain the name of every patient placed in seclusion or under mechanical restraint, with the grounds for such treatment and its duration, and also exhibit the number of patients daily employed, with the nature of such occupation. The "Personal Protocol" further contain, within eight days after the admission of each patient, an account of his or her physical and mental state at the date of admission, the date of deaths, with the causes thereof; the date of discharge or removals, with the names of the persons at whose instance removals or discharges have taken place; the grounds or reasons thereof; the condition of the patient on removal; and, so far as possible, his or her future residence. The protocols or registers—which the reader will at once recognise to be almost identical with the asylum registers in this country—are ordered to be presented before, or exhibited to, the Commissioners of Control (*Controlkommissionærne*), or Commissioners in Lunacy, as we call them in this country, at every visit, by whom they will be examined and thereafter subscribed with any remarks regarding the cases, which they deem it necessary or advisable to make. Section 6 provides that the superintendent or physician to every asylum shall, every three months, send extracts from the protocols mentioned in the preceding section, with a copy of the remarks of the Commissioners therein, as well as an Annual Report of the general condition of the establishment under his charge, to the Board of Control (Controlcommission). Section 7 enacts that over each asylum be vested in a body of Commissioners, who must reside in the neighbourhood, so as to be at all times accessible; this board to consist of three members, of whom one must be a qualified medical man, appointed by the King. A special code of instructions is drawn up by Government for their guidance.* Every asylum may, in addition, be inspected by a person specially appointed for that purpose by the King, at such times and in such manner as he, the King, sees fit. Section 8 relates to the period when the act or law comes into operation.

Chapter II. relates to the admission of patients (*om Sinds Syges Optagelse i Asyler*). Section 9 empowers the superintendent physician of each asylum to inquire into the advisability of

* "Instrux for Controlkommissionær i Overeenstemmelse med Lov om Syges Behandling og Forpleining af 17^{de} August, 1848."

"Instructions for the Commissioners of Control, in accordance with the Act of 17th August, 1848, relating to the Maintenance and Treatment of the Insane."

necessity of admitting each applicant, either on the ground of his own mental state, or for the safety and security of the public, and to decide thereon, it being provided that in case of such applicant or his representatives being dissatisfied with the decision of such superintendent or physician, he or they may appeal to, and must abide by, the deliverance of the Board of Control. Section 10 defines the duty of the police in regard to insane persons committing breaches of the public peace, or who have no relatives or parties responsible for their conduct or maintenance. Section 11 provides that a report of each admission, extracted from the "Personal Protocol" before referred to, along with an account of the patient's condition, be sent to the Board of Control within forty-eight hours after such admission. The board shall, immediately in cases of complaint or under unusual circumstances of any kind, or, in ordinary cases, at their next visit to the asylum, institute such inquiries as will enable them to decide whether the patient is a fit subject for confinement, or not.

Chapter III. relates to the discharge of patients (*om Sindssyges Udtrædelse af Asyler*). Section 12 sanctions the discharge, by the superintendent or physician, of recovered cases. Section 13. The discharge of patients uncured (improved only, or unimproved) is to a certain extent at the option of their relatives or guardians—that is, provided they have not been placed in the asylum at the instance of the legal authorities, or the removal proposed is not, in the opinion of the superintendent or physician, fraught with danger either to the patient or to the public—in which latter cases the decision of the Board of Control is final and binding. Section 14. Discharges and deaths of all patients are to be reported, along with an account of the condition of each patient at the time of such discharge or death, by the superintendent or physician, both to the Board of Control and to the relatives or guardians,—to the former within forty-eight hours, and to the latter as soon as possible after such event.

Chapter IV. relates to patients living in or with their own families, or in private houses or asylums (*om Skilssyge der forbliver hos deres Familie; eller udsættes i privat Forplejning*). Section 15 renders it compulsory to report without delay, to a qualified medical man, either directly or through the clergymen of the parish or district, every case of insanity, or supposed insanity, said medical man being in such event called upon forthwith to examine and report as to the nature of the case, the expediency and form of confinement, &c. Section 16 renders it obligatory to place all violent patients in asylums. It is the duty of medical men to report to the legal authorities all cases of doubtful

insanity which may come to their knowledge in private. Section 17 places harmless insane paupers, who, from the nature of their insanity, do not require special treatment or confinement, on the footing of ordinary paupers in regard to maintenance. Section 18 obliges medical men to report at the end of each year to the "Medicinal-bestyrelse"—apparently a sort of national medical board—the names and condition of the patients.

Chapter V. consists of general regulations (*almindelig mælsel*). Section 19 relates to the source of payment for paupers, and the allocation of the expense of their maintenance in asylums. The sum is to be assessed on the district or birthplace in certain events. Section 20 enacts that an insane patient be kept along with criminals. Section 21 publishes fines and punishment for neglect or infringement of the foregoing laws or regulations, with withdrawal from the case of private asylums or houses, &c.

It is scarcely necessary to call attention to the stringency of the enactments of the Norwegian Law of 1848; but it may not be amiss to refer specially, as to the bulky, confusing, contradictory, and most unsatisfactory lunacy laws of England and Scotland, to its extreme conciseness, and simplicity. In connexion with the Norwegian law, as briefly here expounded, I have yet to advert to that of the Board of Control, as given in their special code of regulations from Government already quoted. The Commissioners of Control are entrusted with the supervision of the treatment of patients, and the economy of the establishment, in all asylums. They lay down both general rules applicable to all asylums and special rules for individual establishments. They visit each asylum twice a month, investigating all matters falling within their jurisdiction; but they may visit, or any individual member of the Board of Control may visit, whenever they or he think fit or necessary; they may examine particularly into the amount of work done by patients, of their social pleasures, creature comforts, into the kind, frequency, and duration of their confinement, the nature of the dietary, the condition of instruction, religion, the due classification of patients, &c. They inquire into all complaints from patients or attendants, determine the kind and amount of punishment for offences. They also receive and inquire into complaints or suggestions in reference both to the admission and discharge of patients, and in cases of differences of opinion between the superintending physicians of asylums, and the relatives or guardians of patients, or in cases of appeal against the decision or procedure

medical officers. They make entries in the asylum registers of all matters falling under their observation which may seem to them calling for, or worthy of, record. They must account for all instances of absence from duty on their own part, and make a marking of the causes thereof in the asylum registers. Their powers and privileges appear to be otherwise very similar to those of our Commissioners in Lunacy in this country, except that they are more special and minute. I think I have said enough to prove that the Norwegians are by no means behind ourselves in respect of a liberal, humane, and enlightened treatment of their insane.

I must now draw my remarks to a close, by a few considerations on the statistics of insanity in Norway; and here I have to acknowledge my obligations to the several publications of Professor Holst, of the University of Christiania, on this subject, as well as to that gentleman individually, for much valuable information regarding the insane and asylums in Norway, communicated in the course of conversation. He has published the statistics of insanity as gathered from three several censuses of Norway—viz., those of 1825-6, 1835, and 1845.*

The latest statistics to which I have had access are those furnished on the census of 1845, as contained in a paper published by Professor Holst in the "Norwegian Journal of Medicine," and kindly given me for the purpose of reference by the Professor himself.† In order to ensure accurate information, I give his own tables and remarks unaltered, except so far as translation is concerned. His paper includes the blind, deaf and dumb, and leprosy; but with these we have here nothing to do, and I have accordingly omitted all notice of them.

* His investigations will be found in—

1. "Gersons and Julius' Magazin d. ausländischen Literatur d. gesammten Heilkunde. 1828. July—August, s. 10—23."

2. "Annales d'hygiène publique et de Médecine légale." Paris. 1830. Tom. iv. s. 323—359.

3. "Allg. Zeitschrift f. Psychiatrie und psych.-gerichtl. Medicin. 4 Band. 1847. s. 479—487."

In his statistics, deduced from the first two censuses, those of 1825-6 and 1835, he adopts the classification of the forms of insanity employed by Pinel and Esquirol—viz., a division into the great types of mania, melancholia (monomania), dementia, and idiocy.

† "Sindssyge, Blinde, Døvstamme og Spedalske i Norge den 31 Dec., 1845. Ved Prof. Dr. Frederik Holst, Aftrykt fra Norsk Magazin for Lægevidenskaben, 7. Bd. 1851."

"Statistics of the Insane, Blind, Deaf and Dumb, and Leprous in Norway, according to the Census of 31st December, 1845."

I.—Table showing the Number of Insane in Towns in Norway, according to the Census of 31st December, 1845.

Names of Towns.	Furious.*			Fatuons.†						Furious and Fatuous.			Population.			Proportion of Insane to Population.	
	M.		Total.	Congenital.		Subsequent to Birth.		Congenital and Acquired.		Total.	M.	F.	Total.	Males.	Females.		Total.
	M.	F.		M.	F.	M.	F.	Total.									
Christiania.....	11	9	20	1	1	1	1	2	2	4	13	11	24	16,109	15,594	31,703	1:1321
Drøbak.....	1	1	2	...	...	...	...	...	1	1	1	2	3	675	675	1,350	1:450
Hvidsten.....	...	...	...	...	...	...	...	...	1	1	...	1	1	41	59	100	1:100
Hølen.....	...	...	...	...	...	...	...	...	...	...	...	...	...	100	99	199	1:199
Soen.....	...	...	...	...	2	1	...	2	1	3	2	1	3	189	207	396	1:132
Moss.....	...	1	1	...	...	...	...	...	...	...	...	1	1	1,927	2,096	4,023	1:4023
Sarpsborg.....	...	...	...	...	...	...	...	...	...	...	...	...	...	653	672	1,325	1:679
Frederikstad.....	...	...	...	3	...	...	...	3	1	4	3	1	4	1,393	1,323	2,716	1:679
Frederikshald.....	2	2	4	...	2	2	4	2	6	8	4	8	12	2,788	3,222	5,790	1:482.5
Lillehammer.....	...	...	...	...	...	...	...	...	...	...	...	...	...	354	341	695	1:695
Drammen.....	3	2	5	7	...	...	...	12	9	21	15	11	26	3,910	4,466	8,376	1:322.2
Holmsboe.....	1	1	1	...	...	...	...	...	...	...	1	...	1	148	145	293	1:293
Svelvigen.....	...	1	1	...	1	...	...	...	1	1	...	2	2	559	642	1,201	1:600.5
Kongsberg.....	1	5	6	1	3	1	...	2	3	5	3	8	11	1,996	2,140	4,136	1:876
Holmestrand.....	...	...	...	...	...	...	...	...	...	...	...	...	...	817	891	1,708	1:876
Åsgaardstrand.....	...	...	...	...	...	...	...	...	...	...	...	...	...	216	228	444	1:444
Tonsberg.....	2	1	3	...	2	3	...	2	3	5	4	4	8	1,041	1,304	2,345	1:280.6
Sandefjord.....	...	...	...	...	...	1	...	...	1	1	1	1	1	336	428	794	1:794
Laurvig.....	...	...	...	2	...	6	3	8	3	11	8	3	11	1,886	2,126	4,012	1:364.7
Skien.....	...	2	2	...	1	2	1	2	2	4	2	4	6	1,740	1,937	3,677	1:613
Porsgrund.....	...	...	...	3	1	1	2	4	3	7	4	3	7	1,043	1,171	2,214	1:316.3
Brevig.....	...	2	2	...	...	...	...	...	...	...	...	2	2	730	725	1,455	1:727.5
Stathelle.....	...	...	...	1	...	...	...	1	1	2	1	1	2	160	159	319	1:159.5

Names of Towns.	Furious.*			Persons.†						Furious and Fatuous.			Population.		Proportion of Insane to Population.
	Congenital.		Total.	Subsequent to Birth.		Congenital and Acquired.		Total.	M.	F.	Total.	Males.	Females.	Total.	
	M.	F.		M.	F.	M.	F.								
Arendal	1	...	1	1	8	1	8	9	2	8	10	1,645	1,917	3,562	1:356.2
Grinestad .....	...	...	...	1	1	...	1	1	...	1	1	379	427	806	1:806
Lillesand .....	...	...	...	1	...	...	...	...	1	...	...	291	280	571	1:571
Christianssand	1	9	10	2	2	6	4	10	7	13	20	3,962	4,397	8,349	1:447.4
Mandal	1	...	1	2	3	3	2	5	7	12	6	1,041	1,263	2,304	1:384
Farsund .....	...	...	...	1	1	2	2	4	2	2	4	488	607	1,095	1:273.7
Flekkefjord	1	...	1	...	1	1	1	2	2	1	3	705	905	1,610	1:536.6
Sogndal .....	...	...	...	...	...	...	...	...	...	...	...	167	181	348	—
Egersund .....	...	...	...	...	1	1	1	3	1	1	2	587	644	1,231	1:615.5
Stavanger	4	1	5	...	12	9	14	23	13	15	28	4,158	4,488	8,646	1:308.8
Bergen	3	5	8	6	11	17	16	33	20	21	41	11,016	12,513	23,529	1:573.9
Aalesund	1	1	2	...	...	...	...	...	...	1	2	565	592	1,157	1:578.5
Molde	2	...	2	...	2	...	2	2	2	2	4	557	626	1,183	1:295.7
Christiansund .....	...	...	...	1	1	1	1	2	1	1	2	1,498	1,666	3,163	1:1581.5
Thronthjem ..	24	10	34	6	3	6	4	12	7	19	53	6,954	7,824	14,778	1:278.8
Levanger .....	...	...	...	...	...	...	...	...	...	...	...	268	390	758	—
Bodø .....	...	...	...	...	...	...	...	...	...	...	...	121	137	258	—
Tronsmø	2	...	2	1	1	2	3	3	3	2	5	973	1,038	2,011	1:402.2
Hammerfest ..	...	...	...	2	...	3	...	3	3	...	3	532	395	927	1:509
Vardø .....	...	...	...	...	...	...	...	...	...	...	...	113	80	193	—
Vadsø .....	...	...	...	...	...	...	1	1	...	...	1	211	177	388	1:388
Total	61	53	114	42	34	60	75	109	211	163	162	77,930	83,945	161,875	1:498.1

* The word used by Professor Holst is *Rasende* (Gale), which includes mania, monomania, and melancholia of Pinel and Esquirol. He defines the term to apply to those having a general disturbance or excitation of the cerebral functions, associated with violence, &c.

† The word used is *Fjævel*—cases marked by a weakness, or deficiency in the development, of the cerebral functions. He makes two subdivisions: congenital cases (idiocy), and acquired, or subsequent to birth, (dementia).

II.—Table showing the Number of Insane in Country Districts, or Counties, in Norway, according to the Census of 31st of December, 1845.

Names of Districts.	Furious (Rasende).			Furious (Fjerner).				Furious and Fatuous.			Population.			Proportion of Insane to Population.			
	Congenital.		Subsequent to Birth.	Congenital and Acquired.		M.	F.	Total.	M.	F.	Total.	Males.	Females.		Total.		
	M.	F.		M.	F.											M.	F.	Total.
	M.	F.	Total.	M.	F.	M.	F.	Total.	M.	F.	Total.	Males.	Females.		Total.		
Agerhus Amt*	37	28	65	69	74	27	46	96	120	216	138	148	286	37,713	37,971	75,684	1:269.3
Smølenes	17	20	37	42	54	21	33	63	87	150	80	107	187	29,710	30,058	59,768	1:339.2
Hedemarken	24	25	49	89	82	39	46	128	128	256	152	153	305	42,441	44,677	87,118	1:288.8
Christians	47	40	87	108	119	26	46	129	165	294	176	205	381	49,899	52,136	102,035	1:267.7
Buakerude	30	44	74	81	76	32	62	113	138	251	143	182	325	34,984	36,129	71,113	1:218.8
Jarlsbergs and Laurvigs	22	21	43	44	34	22	34	66	68	134	88	89	177	26,074	26,592	52,666	1:296.9
Bratsbergs	36	36	72	48	42	27	33	75	75	150	111	111	222	30,148	31,711	61,859	1:278.6
Nedenæs and Raabygdalset	19	28	47	68	53	24	19	87	72	159	106	100	206	28,078	28,445	56,523	1:225.8
Listers and Mandals	26	39	65	55	43	38	51	93	94	187	119	133	252	33,803	34,757	68,560	1:192.7
Stavangers	32	24	56	59	46	28	36	87	82	169	119	106	225	33,884	34,101	67,985	1:302.1
South Bergenhus	41	33	74	68	61	33	43	101	104	205	142	137	279	46,012	47,448	93,460	1:335
North Bergenhus	18	30	48	60	63	17	43	77	106	183	95	136	231	37,176	39,802	77,978	1:337.5
Romsdals	20	27	47	49	46	25	30	74	76	150	94	103	197	38,240	38,571	76,811	1:384.9
South Thronhjems	20	24	44	52	67	40	27	92	94	186	112	118	230	36,765	37,786	74,551	1:324.1
North Thronhjems	16	25	41	58	69	25	31	83	100	183	99	125	224	32,267	33,645	65,912	1:293.8
Nordlands	14	12	26	43	42	26	24	69	66	135	83	78	161	31,974	33,280	65,254	1:405.3
Finnmarkens	8	6	14	14	19	13	23	26	42	68	34	48	82	20,142	20,377	40,519	1:492.9

III.—The following Table shows the Number of the Insane in the aggregate Towns of Norway, during the Years 1825-6, 1835, and 1845, respectively.

		1845.			1835.			1825-6.		
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Furious (Rasende)	{ Mania Monomania }	61	63	114	{ 57	61	118	86	91	177
2. Fatuous (Fjantet)	{ Subsequent to birth (dementia) From birth (idioty) }	60	75	135	{ 35	26	61	61	23	84
		42	34	76	49	34	83	20	23	43
Total		163	162	325	176	166	342	121	108	229

IV.—The following Table shows the Number of the Insane in the aggregate Country Districts of Norway, during the Years 1825-6, 1835, and 1845, respectively.

		1845.			1835.			1825-6.		
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Furious (Rasende)	{ Mania Monomania }	427	403	830	{ 306	299	605	234	211	445
2. Fatuous (Fjantet)	{ Subsequent to birth (dementia) From birth (idioty) }	462	627	1089	{ 269	286	555	164	147	311
		997	990	1987	836	779	1615	349	288	637
Total		1890	2079	3969	1637	1697	3334	684	796	1680

V.—The following Table is made up of the two previous ones, and exhibits the Number of the Insane in the aggregate Towns and Country Districts of Norway—that is, in the whole Kingdom—during the Years 1825-6, 1835, and 1845, respectively.

		1845.			1835.			1825-6.		
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Furious (Rasende)	{ Mania Monomania }	488	516	1003	{ 363	360	723	270	242	512
2. Fatuous (Fjantet)	{ Subsequent to birth (dementia) From birth (idioty) }	522	702	1224	{ 304	331	635	198	178	376
		1030	1024	2062	885	813	1698	369	311	680
Total		2049	2241	4290	1813	1763	3576	1005	904	1909

VI.—Table showing the proportion of the Insane to the General Population of Norway, during the Years 1825-6, 1835, and 1845, respectively.

	1845.			1835.			1825-6.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. In towns	1:478:1	1:518:2	1:498:1	1:349:2	1:406:9	1:377:2	1:449:4	1:553:9	1:498:7
2. In country districts	1:304:5	1:284:9	1:294:2	1:320	1:339:3	1:329:6	1:516:6	1:603:6	1:557:8
3. Whole kingdom	1:318:9	1:301:3	1:309:7	1:323:9	1:345:7	1:334:1	1:508:5	1:597:6	1:460:7

VII.—There is a remarkable change in the number of insane during the two decennial periods from 1825 to 1835, and from 1835 to 1845, as the subjoined Table shows:—

—	1835-45.			1825-35.		
	Increased or diminished absolutely.	Proportion per cent. of increase or diminution.		Increased absolutely.	Per cent. increased.	
		Without relation to the Popula- tion.	In pro- portion to the Popula- tion.		Without relation to the Popula- tion.	In pro- portion to the Popula- tion.
1. In towns	- 17	- 5 $\frac{1}{2}$	- 24 $\frac{3}{8}$	+ 113	+ 40 $\frac{3}{8}$	+ 37 $\frac{1}{2}$
2. In country districts	+ 731	+ 22 $\frac{6}{8}$	+ 12 -	+ 1554	+ 92 $\frac{5}{8}$	+ 89 -
3. Whole kingdom	+ 714	+ 19 $\frac{9}{8}$	+ 7 $\frac{9}{8}$	+ 1667	+ 87 $\frac{3}{8}$	+ 64 $\frac{3}{8}$

The number has, on the whole, increased during both decennial periods; but there is a diminution in the proportion of cases from towns.

VIII.—The increase has been greater during both decennial periods than the relative increase of the population:—

	In 1835-45.	In 1825-35.
In towns the increase has been	25 $\frac{5}{8}$	11 $\frac{7}{8}$
In country districts	9 $\frac{5}{8}$	13 $\frac{9}{8}$
In whole kingdom	11 $\frac{2}{8}$	13 $\frac{6}{8}$

Whereas during the first decennium an increase occurred among all classes of the insane, during the second it has been in the classes of dementia and idiocy; the number of cases of mania and melancholia (*rasende*) having considerably diminished, thus:—

	In 1835-45.	In 1825-35.
1. Furious (<i>Rasende</i>) { Mania }	- 20 $\frac{1}{8}$	+ 41 $\frac{1}{8}$
{ Melancholia . . }		+ 69 -
2. Fatuous (<i>Fjanter</i>) { Dementia }	+ 135 $\frac{4}{8}$	+ 52 -
{ Idiocy }	+ 21 $\frac{5}{8}$	+ 150 -

IX.—It will be noticed, from the foregoing Tables, that there is a much smaller proportion of insane in the towns than in the country, being in the former 1:498·1, and in the latter 1:294·2; hence it might be supposed that the causes of insanity are more rife in the latter. In Hölen, Sarpsborg, Lillehammer, Holmestrand, Aasgaardstrand, Soggendal, Levanger, Bodøe, and Vardøe, which are all thinly-peopled seaport or market towns,—Sarpsborg and Holmestrand, however, having respectively upwards of 1300 and 1700 inhabitants,—and which have an aggregate population of 5928, there are no insane persons. In the country districts, or *amts*, the number was greatest in Christians, Listers and Mandals, Buskeruds, Nedenæs and Raabygdelaugets amts—being respectively 1:137·1, 1:192·7, 1:218·8, and 1:225·8; least in Nordlands and Finmarkens amts—being respectively 1:405·3 and 1:493.

From these Tables it would appear that the insane population of Norway is about 5000. In 1825-6, it was 1909; in 1835, 3576; and in 1845, 4290. At this rate of increase, 5000 not too large a number to set down against the year 1857, a period of twelve years having elapsed since the date of the latest census upon which my calculations are based. In truth, it must be far below the real number, but it is sufficiently accurate for present purpose. We have already seen, on the other hand, that Gaustad has present accommodation for between 160 and 200 patients, and prospective accommodation for 250—say 250; and that the Mangelsgaarden Asylum cannot admit above 60. The other Norwegian asylums are—one in Opslöv, a suburb, or north of Christiania, with room for 30 or 40 patients, in round numbers; one in Bergen, for 70 or 80; one in Throndhjem, for 60 or 70; one in Stavanger, for 8 or 10—all on the west coast—and one in Christiansand, for 30 or 40.* Now, if we take the maximum numbers given above as representing the actual accommodation provided at present in Norway for her insane population, we shall find the total to be 550, which, being deducted from 5000, the supposed total number of insane persons in Norway at the present date, leaves the enormous balance of 4450 apparently inadequately provided for, or not provided for at all! Much, therefore, still remains to be achieved in Norway in regard to proper provision for her insane; but with her liberality, and modern views on the treatment of insanity, and the construction and management of asylums, I have no fear as to the ultimate result.

ART. IV.—CHARLOTTE BRONTË—A PSYCHOLOGICAL STUDY.

„Man herrscht noch ein Zweifel darüber, dass der Geist nicht so, wie wir ihn im gebildeten Menschen der Betrachtung unterwerfen können, als etwas Fertiges Angebildetes bei der Geburt des Menschen mit in die Erscheinung tritt; dass vielmehr nur die Möglichkeit der Entwicklung bis zur höchsten Vollkommenheit dem Menschen innewohnt; dass der gebildete Menscheng Geist somit ein Product sei der Erziehung, wie solche bewirkt wird durch den innewohnenden eigenen Bildungstrieb, durch die umgebende Natur, durch die gebildete Vernunft, d. h. durch die absichtliche, von schon gebildeten Menschen ausgehende Erziehung, wie endlich durch die Schicksale und den Lenker und Leiter derselben.“

It does not create the metal, but it makes the current coin, defines the value that must be attached to it in the world, the influence that it will exert upon it. So circumstances do

My informant was Professor Holst, if I remember aright: the numbers are my approximative, and not actual numbers.

not *make* character, but mould it and modify its development, giving it, not its more or less vigorous vitality, but determining in great measure the direction in which this force shall be exerted. The ivy will find its way to the light through the wall, but its course will be longer or shorter, according to the tortuosities which it has to encounter in its passage.

The mode in which the concrete mind is developed and exerted to the world is influenced, or rather determined, by antecedents, which may be summed up under one head,—Hereditary Influence: and surrounding circumstances; include the physical medium into which it is forced—the nature of the climate, the soil, and the scenery; and the social medium, including the period, the social, political, and intellectual condition of the community of which it is to be a member, the class of developed mind with which it comes in habitual casual contact passively; and the active influence exerted upon such minds upon it in the process of education and instruction which it undergoes. To these must be added, as not the least operative, that combination of physical and moral agencies which depends upon the state of poverty or wealth amid which it flourishes or languishes. All these are of potent energy; there is probably no event occurring between the moment of conception and that of the final dissolution of the body, without some defined dynamic influence upon mental development, whether such event be of a purely corporeal or a spiritual nature. What is the primary condition of mind, we have no means of ascertaining. Is mind in its essence strictly free and independent for the varieties of its manifestation entirely determined by organization and external influences? Are there original differences in mental faculties and capacities previous to any influence from within or without? Such questions we cannot answer. There are those who would answer the first question affirmatively; who consider that the immaterial essence is the same in all men; that there is originally an inherent capacity in the development of the highest grades of intellectual eminence; that this capacity is the birthright and possession of every child; and that the differences observed between the different separated orders of intelligence depend upon causes partly determining the organization, such as hereditary influences, food, and certain diseases, &c., and partly directly operative upon the intellect, as through varied moral and intellectual training.

From the very nature of the question, no solution is possible save through the subtleties of metaphysical speculation; we know nothing of spiritual essences except through their manifestations; and these manifestations are solely through the medium of organization. Practically, then, our investi-

must necessarily be limited to the observation of the conditions and capabilities of the organism in relation to mental development.

By far the most powerful and remarkable of the formative influences in the production of character and individuality is hereditary tendency. Not more striking is the feature-likeness between parent and child, than is the resemblance, in a great many instances, between their respective psychical manifestations. We see genius or stupidity propagated generation after generation, as we see the colour of the hair or the form of any particular feature. And not only these general characteristics, but we observe an inheritance of particular dispositions and tendencies, and even, in not a few instances, of acquired habits. This latter is particularly illustrated in some animals, when the results of artificial culture have become in some degree hereditary. The descendants of dogs trained to particular purposes are much more easily educated than others of similar breed, that have not had trained parents. It is most important to observe, also, that vice and tendency to particular forms of crime are hereditary also; and this not only when the vice has been (so to speak) congenital, but when it has been acquired and become habitual. Thus, the confirmed drunkard is likely to have drunken children; and every form of sensuality is liable to be reproduced in the succeeding generation. But even in this very brief and imperfect sketch of the influence of ancestry, we must not omit to mention the development of remarkable ability which is sometimes observed, not as a direct inheritance, but as one of the concomitants of the expiring energies of a degenerate or degenerating race—a phenomenon to which we lately alluded as the "phosphorescence of decay."

The physical medium is, without doubt, of great importance in the formation of character, although it is only when we observe its influence in what may be called extreme cases that we can fully recognise its force. In the districts where cretinism and idiocy are endemic, low forms of mental development are propagated from generation to generation, until the reproductive force is lost; yet if one of these children—one link of this melancholy chain—be taken from birth, and removed to a healthy district, the entail of constitutional vice will be broken; and not only the physical condition will ascend one degree or more towards its normal state, but the faculties of the mind will be improved to a point far above that of its ancestry. We cannot doubt that, within the limits of healthy formation, the same influences are operative in the production of modified organisms, and distinctly sealed minds, though in a degree less marked and obvious; for not more contrasted are the characters of the sleepy,

imaginative Asiatic, and the hardy, practical, adventurous inhabitant of our northern latitudes, than are those of our wild moorland districts as compared with those of smoky and crowded cities.

The moral medium is, perhaps, of still greater direct importance in the formation of mind than the physical ; and its effects are so obvious as to require but little illustration. The early tone of thought, the fundamental ideas, the habitual bent of the mind, will necessarily be derived from early associations, and will have the stamp and impress of the society in which the first years are passed. And these will never be lost ; however after circumstances may be changed, these, the first and most potent impressions will remain, consciously or unconsciously, to tinge the whole future life and character. For instance, the superstition which may mingle with the earliest teachings of a child, may be neutralized by reason in after-days, but the tendency will never be lost.

The period of a country's history and development, and the political aspects of the times, exert a most powerful determining influence upon individual character. This branch of the subject is much too extensive to treat casually ; we shall, therefore, merely enumerate it amongst the most potent of causes, referring for illustration to all the great critical times, in our own country especially, where the crises of history are attended by the appearance of names that of themselves would make or mark epochs. The Elizabethan age, when England was passing (so to speak) from ancient to modern civilization, will furnish a good example of our meaning.

The influence of education, as ordinarily conducted, is more exerted upon the contents of the mind than upon its formation ; yet, according as it is good or bad, the good or evil qualities of the mind will be drawn out and put in exercise ; and it will in some measure determine how far the individual shall be associated with his fellow-creatures by the bonds of good-will and sympathy, or become reserved, repellent, isolated, and suspicious. Even this, however, is limited in its operation ; for, to an acutely perceptive mind, the defects of a system may be so apparent as to produce a directly opposite result to that which might be expected from the data ; and the character may, by means of great internal energy, be formed rather upon what is wanting in the course of education, than what is present—may, in fact, become the complement or supplement of the system.

But little that is certain and definite can be predicated of the influence which poverty exerts upon mental development. It seems to depend chiefly upon the type of mind, whether it acts as a stimulant, or an utter bar to mental exertion and improvement.

however, two secondary results which must necessarily must, to a great extent, limit and control the *practition* of sympathy, and the benevolent emotions generated it must at the same time limit the experience and of the varied forms and conditions of life, by preventing intercourse with the world at large, either travel or free access to all societies. Hence the knowledge character will be founded upon contracted data; and, deep and acute may be the insight, the *range* will be very small.

the circumstances which influence and mould the of all, and the public character of the great majority. especially in relation to authorship that we are interested in tracing the precise results. Some few there minus so exalted that its emanations exhibit few or no its antecedents. In the plays of our immortal drama search in vain for any trace of the strolling actor, the r, the vagabond, the husband of Ann Hathaway, the property, or the country gentleman and magistrate. In the scenery of the "Paradise Lost," we have no indication; there is no blindness, no fierce contest of party ingratitude, no home misery; there is none of the fiery one of the anarchy of the age. There are others of not so indifferent as almost to separate the intellectual life; yet when we hear Goethe's unmoved "Oh!" told that the Allies had entered Paris, and see Sir Rowan quietly writing his treatise on popular fallacies at the crash of a disorganizing state, we feel that this is—that it is not humanity. In Dante, in Petrarch, in Voltaire, Byron, Shelley,—in a crowd of others whose names amongst the greatest and noblest of writers, whatever the theme, we can trace the man. In the "Purgatorio," constant allusions to the political errors of the day; in the "Divine Comedy," the same; so in the others we hear the wailings of the oppressed spirit, the ravings of madness, the soft accents of the oiling wrath of political or social disappointment, the scorn of infidelity, the sneer of universal scepticism, the mockery after utopian forms of society; and we know then that man has spoken as well as the poet. In fact, these glimpses of personality and individuality are but thinly scattered, or form but a small proportion of the works of the author. It is rare to meet with the whole mind; still more rare to be able to trace the entire development of the mind to natural causes—i.e., to antecedents and circumstances which would naturally be expected to produce such an ordinary course. Such is, however, the case in

Charlotte Brontë, the formation of whose mind and character we propose to investigate in the following pages. Her most characteristic work, "*Jane Eyre*," contains a psychical transcript of herself, though the canvas is stretched on a framework of different form to the original; and each point and trait of this character can easily, and without straining, be seen to be due to influences identical with, or analogous to, those to which we have briefly alluded above.

The outlines of her uneventful life are well known through Mrs. Gaskell's graphic pen: the early, almost complete orphanage—the weary, unsocial childhood—the still more weary youth—the hopeless years of fruitless waiting and longing—the patient, trustful perseverance, and almost dogged energy—the brief period of fame, with its few delights, and its many cares and bitternesses—the wearing, wasting toil—the few short months of happiness—the early death—all combine to form a picture of dead, grey tone, with some points of unfathomable blackness, and but few of redeeming colour—a life in which, surely, the last event would be looked forward to as the brightest.

Without at present sketching the biography further, we propose to examine the nature of the antecedents and events which influenced the formation of Miss Brontë's character; and then to review what that character was in itself, as represented by Mrs. Gaskell, and as set forth in "*Jane Eyre*;" and as we have given the first importance to hereditary influence, we shall first inquire what were the elements probably thence derived.

From her gentle, pious, Cornish mother, Miss Brontë inherited a refined, thoughtful, true womanly nature, and probably a delicate, fragile frame;—from her strong-willed, determined, Celtic father, other qualities which dominated over these.

Mr. Brontë was (or rather *is*, for the parent stem has survived all its branches) a native of Ireland, and came of a large family, remarkable for physical strength and beauty. He gave early tokens of great talent, combined with extraordinary force of will and general energy of character, as evinced by his separating himself from the hereditary agricultural pursuits, and devoting himself to an intellectual life. He opened a public school at sixteen years of age; afterwards became a private tutor; and, at the age of twenty-five, entered himself at Cambridge, and ultimately took holy orders.

He was a diligent pastor, but otherwise reserved in his intercourse with his people. He took an active and decided part in the machinery riots, in the early part of this century, in the manufacturing districts of Yorkshire; resisting popular clamour when unreasonable, but supporting the working men with all the energy of his nature when he thought them wronged. Mrs.

Gaskell describes him as of "strong, passionate Irish nature, generally compressed down with resolute stoicism—but it was there, notwithstanding all his philosophic calm and dignity of demeanour; though he did not speak when he was annoyed or displeased." The method which he adopted of working off superfluous excitement gives a little insight into some mental relations, which need not be more particularly specified when speaking of a living character. When annoyed seriously, he would fire pistols off in rapid succession out of the window, and so gradually calm down. He had other eccentricities of a still more suggestive nature, which must have had a marked effect upon the character of his family. He had imbibed the spirit of Rousseau and Day on education, and wished to make his children hardy, and indifferent to eating and dress. He allowed them no animal food during childhood; and on one occasion, when they had been walking over the moors, and their dry shoes and boots had been put before the fire ready for them, he burned them, lest they should become effeminate or vain. On another occasion he burned the hearth-rug, for reasons not given by the biographer; and cut a silk dress of Mrs. Brontë's in pieces, because he did not like it. He associated but little with his children, partly from choice, partly from other circumstances not necessary to detail; so that after their mother's death they were almost completely orphans. Mrs. Gaskell sums up his character as follows:—

"His opinions might be often both wild and erroneous, his principles of action eccentric and strange, his views of life partial and almost misanthropical; but not one opinion that he held could be stirred or modified by any worldly motive. He acted up to his principles of action; and if any touch of misanthropy mingled with his view of mankind in general, his conduct to the individuals who came in personal contact with him did not agree with such view. It is true that he had strong and vehement prejudices, and was obstinate in maintaining them, and that he was not dramatic enough in his perceptions to see how miserable others might be in a life that was all-sufficient to him; but I do not pretend to be able to harmonize points of character, and account for them, and bring them all into one consistent and intelligible whole. The family with whom I have now to do shot their roots down deeper than I can penetrate. I cannot measure them, much less is it for me to judge them. I have named these instances of eccentricity in the father, because I hold them to be necessary for a right understanding of the life of his daughter."

Referring to the well-known proverbial close alliances of great wit, we cannot doubt whence Charlotte Brontë's genius was derived. It is not difficult also to see, in the father's fiery, impetuous character, the source of the strong, indomitable will, the

untiring energy, the deep, fervent imagination, and the reserve and isolation which characterized his daughter Charlotte.

Of Maria Branwell, afterwards Mrs. Brontë, but little is known. Mrs. Gaskell says that, "without having anything of her daughter's rare talents, Mrs. Brontë must have been, I should think, that unusual character, a well-balanced and consistent woman." Her surviving relatives speak of her as "meek and retiring, while possessing more than ordinary talents, which she inherited from her father; and her piety was genuine and unobtrusive." Those of her letters that remain, abound with tender womanly sentiment and grace. Her children seem to have inherited some portion of her admirable mental qualities, but all of that delicacy of constitution which removed her so early from their head.

This singularly assorted yet affectionate pair had six children the very remarkable development of whose characters throws strong reflected explanatory light upon that of the parents. They are described as grave and silent beyond their years; so quiet, that it would almost seem there were no children in the house. "Maria (only seven years old!) would shut herself up in the children's study with a newspaper, and be able to tell on everything when she came out," including debates in parliament &c. &c. The four eldest sisters, in their very early life, produced the impression upon those who knew them, of "wild, strong hearts and powerful minds, hidden under an enforced propriety and regularity of demeanour and expression."

A dreary household and a dreary childhood must this have been. The mother was a constant invalid, and could take no active supervision of the children; not very anxious to see them either, "perhaps because the sight of them, knowing how soon they were to be left motherless, would have agitated her too much." Their father was much engaged, and "besides, he was not naturally fond of children, and felt their frequent appearance on the scene as a drag both on his wife's strength, and as an interruption to the comfort of the household." They had no young companions, and it does not appear that they had any "children's books;" but their "eager minds 'browsed undisturbed among the wholesome pasturage of English literature.'" And so from childhood they had their own society, their father's books and the glorious wild moors which in after-days they loved so much, for their sole companions. Ah, those moors! When grim death visited the two eldest, it was only amid their wild scenery that they could hear his message; when far away from home, it was the wild sweep of the autumnal wind that sung in the ears of the wandering girls, and lulled them to sleep and dreams of their cheerless home, gilded into a fairy-palace at

dreamland; it was only amid those moors that poor Emily Brontë could live—only on them that she could die; it was only there, where their first unchilled draughts of young life were drunk in, that they could again breathe it out, and yield it up to its great Author.

Maria Brontë, the eldest of these children, seems to have inherited a remarkable share of the best and finest qualities of both father and mother. Long before she died, at the age of eleven, "her father used to say that he could converse with her on any of the leading topics of the day, with as much freedom and pleasure as with any grown-up person." Mrs. Gaskell states that Helen Burns in "*Jane Eyre*" was a most faithful transcript of Maria's character, and that the conversations and incidents were such as actually did occur. We can scarcely imagine such sentiments as the following emanating from a mere child; but we quote them as indicating, if not her actual state of mind, yet the appreciation which Charlotte held of her sister's teaching and mode of thought at that time:—

"Life appears to me too short to be spent in nursing animosities or registering wrongs. We are and must be, one and all, burdened with faults in this world; but the time will come when, I trust, we shall put them off in putting off our corruptible bodies; when debasement and sin will fall from us with this cumbrous frame of flesh, and only the spark of the spirit remain,—the impalpable principle of life and thought, pure as when it left the Creator to inspire the creature: whence it came it will return,—perhaps again to be communicated to some being higher than man—perhaps to pass through gradations of glory, from the pale human soul to brighter, to the seraph! Surely it will never, on the contrary, be suffered to degenerate from man to fiend? No; I cannot believe that; I hold another creed, which no one ever taught me, and which I seldom mention, but in which I delight, and to which I cling, for it extends hope to all; it makes eternity a rest—a mighty home, not a terror and an abyss. Besides, with this creed, I can so clearly distinguish between the criminal and his crime; I can so sincerely forgive the first, whilst I abhor the last; with this creed revenge never worries my heart, degradation never too deeply disgusts me, injustice never crushes me too low: I live in calm, looking to the end."

We must give one further illustration of the characters of these children; for, as they were each others' sole associates, the mind of each is of importance as influencing all the rest. Mr. Brontë, apparently in one of his more social and domestic moods, wished to inquire into the talents and ideas of the children; and that they might, as he thought, speak more freely, he put a mask on the face of the one questioned. "I told them," says he, "to stand and speak boldly from under cover of the mask. I began with the youngest (Anne, afterwards Acton Bell, about four

years old), and asked what a child like her most wanted; she answered, 'Age and experience.' I asked the next (Emily, afterwards Ellis Bell) what I had best do with her brother Branwell who was sometimes a naughty boy; she answered, 'Reason with him; and when he won't listen to reason, whip him.' I asked Branwell what was the best way of knowing the difference between the intellects of man and woman; he answered, 'By considering the difference between them as to their bodies.' Then asked Charlotte what was the best book in the world; she answered, 'The Bible.' And what was the next best; she answered, 'The Book of Nature.' I then asked the next who was the best mode of education for a woman; she answered, 'That which would make her rule her house well.' Lastly, asked the eldest (Maria, about ten) what was the best mode of spending time; she answered, 'By laying it out in preparation for a happy eternity.' I may not have given precisely the words, but I have nearly done so, as they made a deep and lasting impression on my memory. The substance, however, was exactly what I have stated."

Maria and Elizabeth Brontë died young,—aged eleven and ten,—and were buried at Haworth, near their well-beloved mother. Branwell lived to cast the shadow of a dark lurid cloud over almost the whole of his sister's life, by intemperance and all its concomitant vices. His wild, reckless, determined nature was shown to the very last—he insisted on dying standing up. Charlotte, Emily, and Anne were the Currer, Ellis, and Acton Bell that for a while formed the mystery of part of the literary world. Emily was of a strange, wild, fierce temper, permitting no sympathy, asking and accepting no aid. The portrait of "Shirley" is intended by Miss Brontë to represent what Emily might have been under favouring circumstances. The incident there related of the bite of the dog, and the cauterizing of the wound with a red-hot iron, actually occurred to Emily. In her illness her sister thus writes of her: "Stronger than a man, simpler than a child, her nature stood alone. The awful pain was, that, while full of ruth for others, on herself she had no pity; the spirit was inexorable to the flesh; from the trembling hand, the unnerved limbs, the fading eyes, the same service was exacted as they had rendered in health. To stand by and witness this, and not dare to remonstrate, was a pain no words can render." Dying of consumption, she would have no advice, no assistance, no sympathy. She refused to see a physician, or to take the remedies prescribed on her friends' descriptions. Only two hours before her death did she consent to see a medical attendant, and then it was too late.

Such a parentage—such family associations—are fully sufficient

to account for the characteristic peculiarities of Charlotte Brontë; but there are still many other elements to notice, which combined to form this remarkable character. The impression made upon strangers by the aspect of the country and the house in which the Brontës resided is vividly shown in a letter from which the following is extracted:—

"The country got wilder and wilder as we approached Haworth; for the last four miles we were ascending a huge moor, at the very top of which lies the dreary, black-looking village of Haworth. The village street itself is one of the steepest hills I have ever seen, and the stones are so horribly jolting that I should have got out and walked if possible; but having once begun the ascent, to stop was out of the question. . . . The clergyman's house was at the top of the churchyard,—so through that we went,—a dreary, dreary place, literally paved with rain-blackened tombstones, and all on the slope; for at Haworth there is on the highest height a higher still, and Mr. Brontë's house stands considerably above the church. There was the house before us, a small oblong stone house, with not a tree to screen it from the cutting wind; but how we were to get at it from the churchyard we could not see! There was an old man in the churchyard, brooding like a ghoul over the graves, with a sort of grim hilarity on his face. . . . Presently we found ourselves in the little bare parlour. . . . Joy can never have entered that house since it was first built; and yet, perhaps, when that old man married, and took home his bride, and children's voices and feet were heard about the house, even that desolate crowded graveyard and biting blast could not quench cheerfulness and hope. Now, there is something touching in the sight of that little creature entombed in such a place, and moving about, herself like a spirit, especially when you think that the slight still frame encloses a force of strong fiery life, which nothing has been able to freeze or extinguish."

A true wild, dreary moorland home was this Haworth, cut off from anything like easy communion with the surrounding district. A neighbour's visit was truly a journey; and so the village was almost isolated from the world, and the Brontës were almost isolated from the village. Here Miss Brontë, with comparatively short intervals of absence, passed the whole of her life; and little as was her intercourse with the people, it could not fail to have some influence upon her; and we shall now examine what this was likely to be.

"For a right understanding," says the biographer, "of the life of my dear friend Charlotte Brontë, it appears to me more necessary in her case than in most others that the reader should be made acquainted with the peculiar forms of population and society amidst which her earliest years were passed, and from which both her sisters' and her own first impressions of human life must have been received." Mrs. Gaskell describes the York-

shiremen as endued with strong sagacity and a dogged power of will, which produce an air of self-sufficiency and independence "rather apt to repel a stranger." He rarely requires assistance and rarely tenders it; hence he over-estimates his own powers.

"The practical qualities of a man are held in great respect; but the want of faith in strangers, and untried modes of action, extends itself even to the manner in which the virtues are regarded; and if they produce no immediate and tangible result, they are rather put aside as unfit for this busy, striving world, especially if they are more of a passive than an active character. The affections are strong, and their foundations lie deep; but they are not—such affections seldom are—wide-spreading, nor do they show themselves on the surface. Indeed there is little display of the amenities of life among this wild, rough population. Their accost is curt; their accent and tone of speech, blunt and harsh. Something of this may probably be attributed to the freedom of mountain air and of isolated hill-side life; something be derived from their rough Norse ancestry. They have a quick perception of character, and a keen sense of humour; their feelings are not easily roused, but their duration is lasting. Hence there is much close friendship and faithful service; and for a correct exemplification of the form in which the latter frequently appears, I need only refer the reader of 'Wuthering Heights' to the character of Joseph. These men are shrewd and faithful; persevering in following out a good purpose, fell in tracking an evil one. They are a powerful race both in mind and body, both for good and for evil."

Mrs. Gaskell gives many amusing and graphic illustrations of the rough energies and determined wills of these Haworth people, as well as occasionally of their brutalized nature, until we can see the origin of many of Miss Brontë's apparently most grotesque scenes and characters. We can see whence were derived the elements for the construction of such characters as the elder Crimsworth, Hunsdon, Yorke, Helstone, and Rochester; and also, from her limited intercourse with such men, how it was that her *dramatis personæ* became rather melodramatic than true natural men. For her imagination, when directed towards character and unchecked by experience, had a strong leaning to the melodrama. In her criticism this is strongly marked by her considering Walter Scott's "Varney" as one of the most powerful of his creations.

Many of the fierce riotous scenes described in "Shirley" are but graphic sketches of actual occurrences during Miss Brontë's childhood and youth; and we can testify that the savage brutality of the lower working classes is not at all overdrawn. We must add further, by way of completing the view of the moral medium amid which she was brought up, that ignorance and superstition not to be exceeded by those of any heathen land, not only did prevail in some of these remote districts of Yorkshire during

Miss Brontë's youth, but do so still. We have ourselves met with children of advanced age who had never heard of a God, who had no idea what prayer meant, and were as thoroughly heathen as any New Zealander. In many parts, almost every door has a horse-shoe nailed to it, to keep out witches; and we have not unfrequently heard obstinate diseases attributed to the patient's having been "ill-wished" by some suspicious-looking old woman, who had undoubtedly been observed entering or leaving the house in some irregular manner, through keyhole or chimney. Notwithstanding all this, and much more that might be said on the same theme, Yorkshire is not *all* as represented by the Brontës: all the manufacturers are not Crimsworths—all the farms are not Wuthering Heights—all the gentlemen are not Rochesters—nor all the *plebs* Cherokees or Blackfoots. On the nature of the characters depicted by these three sisters Brontë, a recent writer in the "National Review" thus speaks:—

"How far the temperament, common under varied aspects to the three sisters, was due to the circumstances of their life, or how far to peculiarities of nature and race, it is impossible to determine. They seem curious offspring of the eccentric, strong-willed Irish father, and the simple, mild Cornish mother. It is as if the churchyard air they breathed, and the strong cold breezes from the moor, had entered into their very nature and made them what they were. Yet they were clearly not children of the soil; the glowing embers that lay but half smothered at the bottom of the character of at least two of them, had in it more of the Southern and Celtic element than of the Northman's opener, clearer fire. Half England now has formed an idea of Yorkshire on what these sisters have written: yet we doubt if they ever understood the North-country character. They studied its exceptional aspects, and familiarity with its external traits enabled them to give life-like costume to their pictures; but their narrow and secluded natures had neither the range nor the opportunity to grasp the broader characteristics of the people amongst whom they lived, and the North-country has received considerable injustice at their hands. . . . The close shadow of the Brontës' churchyard home, the bitter winds, and the wild, dark aspect of their moors, have left the mark of their influence upon the writings as well as the characters of the sisters. They want softness, variety, beauty; they are too often dark, hopeless, discomfortable: on the other hand, they are vigorous and fresh, and bear welcome traces of Nature's close companionship with the minds from which they sprang. A personal impress is strongly marked on them. It is curious that though the writers all had strong imaginations, not one of them had the power to get rid for a moment of her own individuality. It permeates with its subtle presence every page they write. They were not engaging persons, and they felt that they were not—felt it acutely, and made others unduly sensible of it. Nor did they care to see others in their more agreeable and engaging aspects. They had been brought into close contact with the darker shades of character,

and they studied them and reproduced them; too often they used light to give a greater depth to shadow, rather than shadow to set off light."

How Charlotte Brontë individually was affected by the varied influences to which we have alluded, will be best developed by a brief survey of her educational career, and her character during that time.

At a very early age she was sent to the establishment at Cowan Bridge, where events occurred which cast a deep gloom over her future life. Without entering into any of those details which have recently given origin to so much controversy, it is sufficient to know that the bad food and unhealthy situation of the place seemed to undermine the probably already delicate constitutions of the two elder sisters, Maria and Elizabeth: they did not die there, but were removed home, and died during the same year. And thus Charlotte, at the age of nine, was left the eldest of a motherless and almost fatherless family. She continued at the school a little longer, but was soon removed, as it appeared likely to injure her health. Whilst at school, she was considered a "bright, clever child;" but Mrs. Gaskell considers that the early part of the year 1825, just before the death of her sisters, was the last time in her life that the epithet "bright" could justly be applied to her. The active cares of life seemed to begin then; and with few intervals of relief, they continued thickening around her, enveloping her like a gloomy, impenetrable pall, till the time when she was left alone to her work, to wait, perhaps, with some impatience for the end. Now followed an interval of five years at home, in which Charlotte's tastes, tendencies, and character must have undergone great development. The children led a solitary, isolated life, in which there was much time for thought; they were thrown very much upon their own resources; their aunt, Miss Branwell, taught them what she could, and their father related to them public news which to him was interesting, and "from the opinions of his strong and independent mind they could gather much food for thought;" but all this could not exhaust the requirements of young, ardent, active minds. To this, in all probability, may be attributed the bias towards authorship which possessed their whole subsequent lives; for, even whilst such mere children, they adopted, almost from the necessity of their nature, the habit of inventing and writing tales, dramas, poems, &c., of which the principal subjects were the political and military celebrities of the day, especially the Duke of Wellington. These were sometimes combined into magazines, of which there was an editor, who received communications, criticisms, and letters upon the current topics of the time, and responded with due editorial

gravity. Some of these productions are very remarkable for children. Another element, the results of which may be traced in all Miss Brontë's maturer writings, was furnished by Tabby, an elderly woman from the village, who came to reside with them as a sort of half servant, half *gouvernante*. Tabby was a relic of olden times—had lived in Haworth in the days of the packhorses and bells. "What is more, she had known the 'bottom,' or valley, in those primitive days when the fairies frequented the margin of the 'beck' on moonlight nights, and had known folk who had seen them. 'It wur the factories as had driven 'em away.' No doubt she had many a tale to tell of bygone days of the country-side: old ways of living, and former inhabitants; decayed gentry who had melted away, and whose places knew them no more; family tragedies, and dark superstitious dooms; and, in telling these things without the least consciousness that there might be anything requiring to be softened down, would give at full length the bare and simple details." And so, at this plastic age, Charlotte's vivid imagination would become tinged unconsciously with that shade of superstition which every now and then would gleam forth amidst her strong, practical common sense; and her mind would become stored with old legends and accidents, in which, in after-days, she would make her ideal characters actors. If we are not mistaken, even the grotesque incident connected with Mr. Rochester's insane wife was but a reproduction of a currently reported tale in that neighbourhood, with very slight modifications.

What a strange, irregular sort of culture these minds were undergoing, may be inferred, partly, from a list of painters which Charlotte, then only thirteen, made out, as those whose works she wished to see—including "Guido Reni, Julio Romano, Italian, Raphael, Michael Angelo, Correggio, Annibal Carracci, Leonardo da Vinci, Fra Bartolomeo, Carlo Cignani, Vandyke, Rubens, and Bartolomeo Ramerghi;" and this when she had probably never seen a painting worthy of the name.

When about fifteen, in 1831, she is described personally as very small in figure, with soft, thick brown hair, and peculiar eyes, of which I find it very difficult to give a description, as she appeared to me in her later life." ("Jane Eyre" describes her as green eyes.) "The usual expression was of quiet, listening intelligence; but now and then, on some just occasion for indignation or wholesome indignation, a light would shine out if some spiritual lamp had been kindled which glowed behind her expressive orbs. . . . As for the rest of her features, they were plain, large, and ill-set. . . . Her hands and feet were the smallest I ever saw." . . . "I can well imagine that the grave, serious composure which, when I knew her, gave her face

the dignity of an old Venetian portrait, was no acquisition of later years, but dated from that early age when she found herself in the position of an elder sister to motherless children."

In January of this year she again went to school, where she remained nearly two years. She appeared at first as a timid, reserved, awkward, shortsighted girl—very deficient, indeed, in the ordinary branches of education, but confounding her companions, frequently and unconsciously, by her strange acquaintance with out-of-the-way matters that they knew nothing of. During this time, however, these defects of education were corrected, and some of the more amiable qualities of her mind evolved. When she left Roe Head, in 1832, she had "won the affectionate regard both of her teacher and her schoolfellows, and formed there the two fast friendships, which lasted her whole life long," with the "Mary" and the "E." of the memoir. Her correspondence with the latter forms a considerable portion of the work. Mrs. Gaskell observes:—

"In looking over the earlier portion of this correspondence, I am struck afresh by the absence of hope, which formed such a strong characteristic of Charlotte. . . . In after-life, I was painfully impressed with the fact that she never dared to allow herself to look forward with hope; that she had no confidence in the future; and I thought, when I heard of the sorrowful years she had passed through, that it had been this pressure of grief which had crushed all buoyancy of expectation out of her. But it appears from the letters, that it must have been, so to speak, constitutional; or perhaps the deep pang of losing her two elder sisters combined with a permanent state of bodily weakness in producing her hopelessness. If her trust in God had been less strong, she would have given way to unbounded anxiety at many a period of her life. As it was, we shall see, she made a great and successful effort to leave her 'times in His hands.'"

After remaining some time at home instructing her sisters, Charlotte returned to Roe Head as a teacher. Here her life was not unhappy until her health began to fail. At this time a sort of crisis occurred in her constitution, either physical or mental—for in such a tangled chain it is not possible to say which was the first link. "She told me" (says 'Mary') "that one evening she had sat in the dressing-room until it was quite dark, and then, observing it all at once, had taken sudden fright." A similar terror is alluded to in the earlier pages of "Jane Eyre."

"From that time her imaginations became gloomy or frightful; she could not help it, nor help thinking. She could not forget the gloom—could not sleep at night, nor attend in the day. She told me that one night, sitting alone, about this time, she heard a voice repeat these lines:—

'Come, thou high and holy feeling,
Shine o'er mountain, flit o'er wave,
Gleam like light o'er dome and sheeling'—

eight or ten more lines which I forget. She insisted that she had made them—that she had heard a voice repeat them. . . . Whether these were recollected or invented, the tale proves such habits of solitary, monotonous solitude of thought, as would have shaken a strong mind."

To the psychologist all these symptoms are familiar, and suggestive of a state of mind, the relations of which are not difficult to educate. It is not at all improbable that Miss Brontë was subjected occasionally to hallucinations of both eye and ear. Coming, at a later period of her life, upon her habits of sitting long hours after the family had retired, and when she was left alone by the death of her sisters, Mrs. Gaskell says:—

No one on earth can even imagine what those hours were to her. The grim superstitions of the North had been implanted in her during her childhood by the servants, who believed in them. They came to her now,—with no shrinking from the spirits of the dead, with such an intense longing once more to stand face to face with the souls of her sisters, as no one but she could have felt. It seemed the very strength of her yearning should have compelled them to come. On windy nights, cries, sobs, and wailings seemed to go round the house, as of the dearly-beloved striving to force their way to her. No one conversing with her once objected, in my presence, to that of 'Jane Eyre' in which she hears Rochester's voice crying out to her in a great crisis of her life, he being many, many miles distant at the time. I do not know what incident was in Miss Brontë's recollection when she replied, in a low voice, drawing in her breath, 'But a true thing; it really happened.' "

After this period, from time to time we hear of failing health, the most fearful depression of spirits. "Mere bodily pain, however acute, she could always put aside; but too often illness assailed her in a part far more to be dreaded. Her depression of spirits, when she was not well, was pitiful in its intensity. She was aware that it was constitutional, and could do nothing about it; but no reasoning prevented her suffering mentally, while the bodily cause remained in force."

In 1850 she herself says:—

"I don't know what heaviness of spirit has beset me of late, made my faculties dull, made rest weariness, and occupation burdensome. And then the silence of the house, the solitude of the room, has pressed on me with a weight I found it difficult to bear, and recollection has not failed to be as alert, poignant, and obtrusive as other feelings were languid."

Some time afterwards, there is a long annual period of this sort of fiction. To a friend she writes:—

Sometimes the strain falls on the mental, sometimes on the physical part of me; I am ill with neuralgic headache, or I am ground down

to the dust with deep dejection of spirits. That weary time has, I think and trust, got over for this year. It was the anniversary of my poor brother's death, and of my sisters' failing health: I need say no more."

Yet amid all this she was working on, sometimes attempting the life of a private governess, sometimes in a school, with the physical and mental results that might be anticipated. But circumstances seemed to make it imperative that the girls should do something to relieve their father from their support, particularly as at this time he was threatened with blindness. A scheme was devised for opening a school, as a preparation for which, Charlotte and Emily entered for a while a *pensionnat* at Brussels. Of their life at this time, a sufficiently accurate idea may be gathered from "Villette" and "The Professor." The scenes and mode of tuition described in these works seem to be almost historical—all save the actual personal incidents. It was here that, under the philosophic tuition and guidance of M. Heger, Miss Brontë's powerful thinking faculties were, for the first time, systematically drawn out and cultivated. It is not impossible that here also, for the first time, she learnt the potency of other and yet untried emotional elements of her nature; but of this we know nothing, save by perhaps falsely interpreted inferences—so that nothing can be founded on the supposition. On her final return home from Brussels, in January, 1844, it appears that the project of a school was given up temporarily, on account of Mr. Brontë's increasing blindness, and his daughter's conviction that she must not leave him. Shortly after this, she writes to a friend:—"I do not know whether you feel as I do, but there are times now when it appears to me as if all my ideas and feelings, except a few friendships and affections, are changed from what they used to be; something in me which used to be enthusiasm, is tamed down and broken. I have fewer illusions: what I wish for now is active exertion—a stake in life. Haworth seems such a lonely, quiet spot, buried away from the world. I no longer regard myself as young—indeed, I shall soon be twenty-eight; and it seems to me as if I ought to be working and braving the rough realities of the world, as other people do. It is, however, my duty to restrain this feeling at present, and I will endeavour to do so." Poor soul! her discipline was harder than any work—a weary waiting and watching for opportunities that came not—standing well-nigh alone, the earth as iron and the heavens as brass—youth passed without happiness—age creeping on without hope—a weary lot indeed.

In 1845, a volume of poems were published by "Currer, Ellis, and Acton Bell." They attracted but little attention—that little not very favourable: another disappointment. Charlotte quietly

it:—"The book was printed: it is scarcely known; it that merits to be known are the poems of Ellis Bell. conviction I held, and hold, of the worth of these; not indeed received the confirmation of much favourism; but I must retain it notwithstanding." Then the sisters wrote a tale—"The Professor," "Wuthering and "Agnes Grey." After many unsuccessful attempts, they found a publisher; but Charlotte's tale was always "Currer Bell's book," she writes, "found acceptance for any acknowledgment of merit, so that something of a bill of despair began to invade his heart." But, unthwarted, the brave woman began "Jane Eyre," the work placed her in the first rank of female novelists. It appeared on October 16th, 1847. And now her fame was at its height; the worst struggle was over; but clouds gather thick round the domestic life of the author, one by one in succession, the wild, reckless brother, the dearly-loved son, and the youngest and gentlest—the most like the father, passed away, leaving the subdued, broken-spirited woman to labour on alone, and await her own time, uncheered by constant companions in weal or woe. By the 28th of May, 1848, she was alone:—

(she writes) is what I expected it to be. Sometimes when in the morning, and know that Solitude, Remembrance, and Anxiety, to be almost my sole companions all day through—that they will all go to bed with them—that they will long keep me awake next morning I shall wake to them again—sometimes I weary my heart of it. But crushed I am not, yet; nor robbed of hope, nor quite of endeavour. I have some strength left in my battle of life. I am aware, and can acknowledge, I have many mercies. Still I can *get on*. But I do hope that never may you, or any one I love, be placed as I am. A lonely room—the clock ticking loud through a still house open before the mind's eye the record of the last year, with its offerings, and losses, *is a trial*."

Wells gives many features in detail, but no complete picture of the character formed by this life of patient, unbroken

If we examine her correspondence and writings generally, we find unmistakable marks of an ardent, fiery temperament—of an imagination vivid, scintillating, working upon limited material and experience—sympathy warm and affectionate, abounding with all manner of sympathy, that could never find a vent or fit sphere for—of a piety deep, sincere, and practical, yet eminently reserved and retiring, shunning all question or observation—habit of mind reserved, timid, and observant—of an

entire noble nature, enthusiastic and aspiring, quelled a down with unremitting care and suffering. But for the expansions of such a nature, we must look further than a confined, isolated, suffering life. We must see her as she re herself acting and feeling in imaginary conjunctures; and not fear taking her own testimony, for she was not one even self, and under the guise of a fictitious name. For purpose we must glance over the prominent points of *Eyre*,* in which she appears to have given a daguerre herself;* the veritable thoughts and feelings of her li hung on imaginary incidents. Jane is first known as a plain, shy orphan girl of ten years old, neglected and il by an aunt, "bullied and punished" by her son, scor repelled by her daughters; constantly looking for some one to love, but in vain; utterly unattractive in ap and manners. At last, in response to more than usual treatment, the ardent impetuous nature flames out, and whelms the hard ruthless aunt with fear and astonishment is sent to school at the establishment of Lowood (Rochester Bridge), for clergymen's daughters, where for eight y remains utterly cast off by her relatives—six years as a pupil and two as a teacher; indicating, as is observed after a great tenacity of life, considering the treatment which she has described. Unjustly accused of faults not her own, she i morose and rebellious in temper; but the pressure of discipline, and some little casual kindness, at last reduce her to an ordinary tolerably-conducted school-girl. At the end of ten years this isolated life becomes unendurable, and she a for a situation as governess, determined to see more of the world and creatures than a girls'-school can exhibit. Mrs. Fairweather, housekeeper of a country gentleman, Mr. Rochester, answers an advertisement, and engages her to take charge of a ward for a master's. The first meeting between Jane and Mr. F is arranged in a dark lane, where his horse falls—an accident which he afterwards lays to the charge of "her people" and calls the fairies. Now this Mr. Rochester is evident invention of Miss Brontë's, and is intended to represent a noble, generous English country gentleman, with a decided leaning towards unconventionalities. In nothing scarcely does Brontë's contracted intercourse with society more manifestly appear in her elaborate delineations of character; her sketches

* At the time of the first appearance of "*Jane Eyre*," during its first popularity, a relative of the writer was asked by a friend if she had ever known one like Jane; to which she replied, that many years before she had seen only one person who accurately resembled the character; that was a Miss S. She had seen her but once, but the resemblance was too vivid to be mistak at that distance of time.

her finished portraits are chiefly caricatures. This same Mr. Rochester is, we are sorry to say, nothing more nor less than a shabby, coarse, not far from brutal sensualist—a melodramatic character, with some of the reflected refinement of the beholder upon him. He has on the third story of Thornfield a mad wife, degraded as several degrees worse than a satyr, and more savage than a hyena; but of this no one knows anything, and he would willingly have had Jane for his second wife. In their first social interview, he inquires with a domineering abruptness into her previous life and qualifications, which he criticises with no sparing hand; but Jane always likes to be “bullied.” He examines her water-colour drawings, which meet with more favour than her theatrical performances. Three of these he selects to analyse; and to give so vivid a view of Miss Brontë’s style of imagination, we quote the description:—

The first represented clouds low and livid, rolling over a swollen sea, all the distance was in eclipse; so, too, was the foreground, or rather the nearest billows, for there was no land. One gleam of light broke into relief a half-submerged mast, on which sat a cormorant, dark and large, with wings flecked with foam; its beak held a gold bracelet, set with gems. Sinking below the bird and mast, a drowned man glanced through the green water; a fair arm was the only limb clearly visible, whence the bracelet had been washed or torn.

The second picture contained for foreground only the dim peak of a hill, with grass and some leaves slanting as if by a breeze. Below and above spread an expanse of sky, dark blue, as at twilight; glowing into the sky was a woman’s shape to the bust, portrayed in a dusky hue as I could combine. The dim forehead was crowned with a wreath; the lineaments below were seen as through the suffusion of a purple mist; the eyes shone dark and wild; the hair streamed shadowy, like a beamless cloud torn by storm or by electric travail. On the sea lay a pale reflection like moonlight; the same faint lustre touched the train of thin clouds from which rose and bowed this vision of the Evening Star.

The third showed the pinnacle of an iceberg piercing a polar sea under a sky; a muster of northern lights reared their dim lances, close together along the horizon. Throwing these into distance, rose, in the foreground, a head—a colossal head, inclined towards the iceberg, and resting against it. Two thin hands, joined under the forehead, and supporting it, drew up before the lower features a sable veil; a brow pale and bloodless, white as bone, and an eye hollow and fixed, blank of expression but for the glassiness of despair, alone were visible. Above the temples, amidst wreathed turban folds of black drapery, vague in character and consistency as cloud, gleamed a ring of white flame, mingled with sparkles of a more lurid tinge. This pale crescent was a likeness of a Kingly Crown; what it diademed was ‘the shape which shape had none.’”

Nothing ever impressed us more strongly than this with the

conception of Miss Brontë's thoughtful and lonely habits of mind, nor of her wonderful power of word-painting. In the next view of Jane with her master, as she loves to call him, they are two personalities:—

"'You examine me, Miss Eyre: do you think me handsome?'"

"The answer somehow slipped from my tongue before I was a 'No, sir.'"

"'Criticize me: does my forehead not please you?'"

"He lifted up the sable waves of hair which lay horizontally on his brow, and showed a solid enough mass of intellectual organs, an abrupt deficiency where the suave sign of benevolence should have risen. 'Now, ma'am, am I a fool?'"

"'Far from it, sir. You would, perhaps, think me rude if I inquired in return whether you are a philanthropist?'"

The conversations between these two singular characters are piquant enough. Jane's answers, however, remind us more strongly of what occurs to a naturally shy person in conversation, as what might have been said, than of the sort of reply that was likely actually to pass between two such interlocutors.

The story we cannot follow step by step. Jane loves Rochester, and he loves her with frantic passion. Mr. Rochester is Jane without her principle, and supplemented by a strong, coarse, vigorous nature, moral and physical—hence their difference. He relates early in their acquaintance, with wonderful candour, the story of his early sensualities, to which she listens with equanimity, and ultimately undertakes the task of guardian angel, by promising to marry him. Before all the fortunes of her life, she has been warned by dreams of care about a helpless child; and for some time before the wedding day this vision haunts her. On the morning of the day, in the church itself, the secret of the former (or present) mad wife is revealed, and the ceremony, of course, is stopped.

The succeeding scenes are painted with a power which other writers can equal, scarce any excel; but Jane's unbending principle triumphs over all the passion and sophistry of her husband, and she escapes. For days she undergoes the most sickening privations, but finds a home and friends at last, with whom she lives a year. At a crisis of her history she hears Mr. Rochester's voice calling, "Jane, Jane, Jane," though he is a hundred miles distant: she answers, "I am coming—wait for me;" and immediately appears ultimately that he also heard the answer. The next day she sets off for Thornfield, which she finds burnt down. Her husband's wife was burnt with it, and Mr. Rochester was maimed and blinded at the time. He is absent, but she follows him, and they are married; his sight partly returns, and for ten years their happiness is perfect.

"I have now been married ten years. I know what it is to live entirely for and with what I love best on earth. I hold myself supremely blest beyond what language can express; because I am my husband's life as fully as he is mine. No woman was ever nearer to her mate than I am; never more absolutely bone of his bone, and flesh of his flesh. I know no weariness of my Edward's society; he knows none of mine; any more than we each do of the pulsation of the heart that beats in our separate bosoms—consequently we are ever together. To be together is for us to be at once as free as in solitude, as gay as in company. All my confidence is bestowed on him, all his confidence is devoted to me; we are precisely suited in character—perfect concord is the result."

Alas! that one who so well could paint what life might be, should have so little experience of it. When her youth was passed, Miss Brontë married;—whether with that perfect, expansive, all-comprehensive love of which her original nature was capable or not, we have no right to inquire. She was happy. "We her loving friends, standing outside, caught occasional glimpses of brightness, and pleasant, peaceful murmurs of sound, telling of the gladness within; and we looked at each other, and said, 'After a hard and long struggle—after many cares and many bitter sorrows—she is tasting happiness now!' Those who saw her, saw an outward change in her look, telling of inward things. And we thought, and we hoped, and we prophesied in our great love and reverence. . . . But God's ways are not as our ways!"

In a few short months she went to join those sisters whom she had loved so well. On March 31st, 1855, she rested at last, after a weary warfare of thirty-nine years. *Requiescat.*

ART. V.—PHYSIOLOGICAL PSYCHOLOGY.

No. V.

BY ROBERT DUNN, F.R.C.S. ENG.

(Continued from No. VI., p. 367.)

Recapitulation.—Consciousness we have viewed in the light of an ultimate fact, beyond which we cannot go,—as the *distinguishing* attribute of animal life; and self-consciousness as the *primary condition of intelligence*,—in a word, as *mental existence*. It is, in fact, equivalent to the knowledge which we possess of our own personal identity, for it is implied in every sensation which we experience, and in every mental act that we perform—in *feeling, perceiving, thinking, and willing*. *Consciousness* and *immediate knowledge* are universally convertible, and *psychology* itself is

only developed consciousness. Reid and his follower, Dugald Stewart, were clearly in error in restricting the function of consciousness to that of a *particular faculty*, co-ordinate with the other intellectual powers, instead of regarding it as *the universal condition of intelligence*. For—

“In consciousness, as the original spontaneity of reason (*νοῦς, locus principiorum*), are revealed the premordial facts of our intelligent nature. Consciousness is the fountain of all comprehensibility and illustration, but *as such* cannot itself be illustrated or comprehended. To ask how any fact of consciousness is possible, is to ask how consciousness itself is possible; and to ask how consciousness is possible, is to ask how an intelligent being like man is possible.”*

Now, we can best conceive of consciousness, as “one and indivisible” in relation to time, as an incalculably rapid succession of acts or states, and as passing from the moment of birth—the helplessness of infancy—to the maturity of age, through a progressive series of developments—through the different phases of sensational, perceptive, and intellectual consciousness. To FEEL, TO PERCEIVE, AND TO THINK, or, in other words, *sensation, perception, and intellection*, are distinctly progressive stages in our psychological progress. They are the three great and distinguishing phases of mental activity and development, under which are comprised all our psychological phenomena, of whatever kind; and they each severally have and require, for the manifestation of their respective phenomena in this life, *a distinct organic instrumentality*, of corresponding elaboration and complexity, in the nervous apparatus of the cerebro-spinal system of man.

Sensori-motor, consensual and instinctive feelings and actions, are the phenomena which formulate the sensational consciousness; to these are superadded, *ideation and volition, with their associates, memory and emotional sensibility*, as the essential phenomena of the perceptive consciousness; and to these, *imagination, imitation, articulate speech or language, ratiocination, and the processes of thought and reflection*, as the distinguishing attributes of the intellectual consciousness.

But to ask a *reason*, as Sir William Hamilton has justly remarked, for the possibility of our *intuitions, sensational or perceptive*, above the *fact of their reality or consciousness*, “betrays,” as Aristotle has truly said, “*an imbecility of the reasoning principle itself*,” for the facts, *as ultimate*, are inexplicable. “What we do know of self, or person, we know only as given in the consciousness: there is revealed to us, as an ultimate fact, a *self* and a *non-self*; each given as independent—each known only in antithesis to the other. And no belief can be more *intuitive, universal, in-*

* Sir William Hamilton.—Vide “Edinburgh Review,” vol. lli. p. 176.

diate, or irresistible, than that this antithesis is real, and known to be real; and no belief is therefore more true.”*

Whatever may be the notion entertained of the abstract nature essence of mind, one thing is manifestly obvious, that the sensori-motor phenomena—in other words, that *sensibility and utility*—indicate its primordial points of contact with the external world or nature. And as to the universality of *instinctive movements*, Sir Henry Holland has well observed:—

“Wherever there is organization, even under the simplest form, there are sure to find *instinctive action*, more or less in amount, destined to give the appropriate effect to it. This is true throughout every part of the animal series, from men and the quadrumana down to the lowest form of infusorial life. When we consider how vast this scale is—crowded with more than a hundred thousand recognised species, exclusively of those which fossil geology has disclosed to us—we may well be amazed by the profuse variety of *instinctive action*; as multiplied in kind as are the organic forms with which it is associated, and derived from one common POWER—that of *instinct*.”†

But amazing as this may be, are we not still more in “wondering mazes lost,” when we reflect upon *all* the endowments of the primordial cell (vegetable or animal), with its granular nuclei, microscopically minute, and upon the community of function of its ultimate constituents; bearing in mind, at the same time, that within this solitary cell are potentially contained not only the *instinctive activities* above indicated, ranging from the infusoria up to man, but the perceptive, the affective, and the intellectual faculties of every class,—the god-like attributes of man himself, and even distinguishing peculiarities and idiosyncracies hereditarily transmitted from parent to offspring?

Of the three forms of mental activity—the sensational, perceptive, and intellectual, and under which all our varied psychological phenomena arrange and group themselves—*self-consciousness* is the earliest, and consequently the lowest, phase of development; for in it the mind at first exists in a state of bare receptivity. The senses, indeed, come into play from the moment of birth, and soon acquire the utmost perfection of which they are capable; but the *intelligence* is purely sensational, the *feelings* are simply those of pleasure and pain, and the *impulses to action* are innate and instinctive. In perceptive or *world-consciousness*, an increasing amount of mental activity obtains, arising from the conflict of the perceptive faculties of the mind with the external world or nature. Indeed, all our *immediate knowledge*, of whatever kind, is intuitive, and has its origin in perceptive experience.

* Vide “Edinburgh Review,” *ante cit.*

† Sir Henry Holland’s “Chapters on Mental Physiology.”

Here we have superadded to sensational, the *perceptive intuition ideation, and the cognition of outward realities*; to sensori feelings, the *emotional and moral sensibilities*; and to innate instinctive impulses, *volitional powers and intelligent action*. But it is in the *intellectual consciousness* that the mental activity reaches its culminating point, in the region of *representational knowledge*. It is here, through imitation, imagination, and rationalisation, that the mind attains to its highest phase of development—grasping, through the range of the intellectual and reflecting faculties, *abstract ideas, and necessary and universal truths*, and finding articulate utterance and expression for the through the faculty of speech in language.

Now, nervous actions are of a threefold character—*physical sensory, and voluntary*. There are—

1st. The physical and reflex actions of the excito-motor system, which occur *without sensation*;

2ndly. The sensori-motor—the consensual and instinctive actions of the *sensational consciousness*; and

3rdly. The voluntary—the volitional, emotional, and intelligent actions of the *perceptive and intellectual consciousness*.

We recognise and detect the first of these, the physical as reflex, exclusively *only* in the lowest animal organisms. They are essentially automatic, and occur *without sensation*. The sensori-motory actions are typical of animal life, and in conjunction with the first, or excito-motory, characterise the whole of the invertebrate sub-kingdom; whilst in the vertebrate series, the first and second, the third, or purely voluntary, are superadded, and constitute the distinguishing feature of the cerebro-spinal system.

Accordingly, the nervous system of man, from the nature of its office, and its functional endowments, admits of a threefold division also, into—

1. The physical or excito-motory, and reflex—the *true spinal system of Dr. Marshall Hall*;

2. The nutritive and secretory, or ganglionic system; and

3. The sentient, psychical, and voluntary, or cerebro-spinal system.

But it is only with the last of these, the cerebro-spinal system, that we are now more immediately concerned; for the physical or excito-motory phenomena are *without* the domain, and *beyond* the control of intelligence,—and the reciprocal relations of the ganglionic and the cerebro-spinal systems have but an indirect though most important practical bearing upon our present subject of inquiry. As we have said, in its totality, the nervous apparatus of the cerebro-spinal system comprises the *organic instrumentalities* through which the phenomena of sensation, percep-

Intellection are manifested in this life ; in other words, as centres of the sensational, perceptive, and intellectual consciousness. Now, we have seen that the sensory ganglia are the source of the sensational consciousness of whatever kind, whether of sensorial, but of emotional feeling ; and that the spinal axis, and the corpora striata at its summit, are the source of all the movements of the body—reflex, sensorial, and volitional ; so that the nervous apparatus of sensational consciousness—the system of automatic and instinctive action, subservient to sensation, and to those and instinctive actions which are indissolubly linked with sensations—consists of the spinal axis and nerves, the medulla oblongata, and the chain of sensory ganglia, including the special senses at its summit. For, as I have before said, if we follow up the cranial prolongation of the spinal medulla oblongata, into the fibrous strands of which are imbedded the *respiratory, auditory, and gustatory ganglia*, and if we trace out its ramifying branches, we find it sending out fasciculi of fibres to the ganglionic centres at its base—to the cerebellum, the corpora quadrigemina, the corpora striata, and to the peduncles of the olivary ganglia, and thus to the *sole exclusion of the cerebrum*, an organ superimposed and superadded, and whose connection is strictly *commissural*, the whole series of the ganglia of the cerebro-spinal system, including those of the spinal senses, form a direct fibrous connexion with the cranio-spinal axis, forming, as an aggregate or whole, the *sensorium commune*, or the *source of sensational consciousness, and of consensual and instinctive action*.

As the functions of an *independent centre of action*, and as a *distinct nervous apparatus*, the phenomena of the intellectual consciousness are not to be confounded with volitional and intelligent actions. But upon this nervous apparatus of sensational consciousness, for the purpose of combining and directing, in the development of the active powers of his mind, the instinctive impulses, sensational feelings, emotional and volitional abilities, with the higher intellectual activities, and for the noblest and most exalted in the economy of man, there is superimposed and superadded—the cerebellum, the great hemispherical ganglia, and which, in its totality, form the instruments or organs both of the perceptive and of the intellectual consciousness. For if there be one point in the physiology of the brain more unequivocally demonstrated than any other, it is this—that these ganglia are the instruments of intellectual action and volitional power ; and that, wherever they are, even in their simplest rudimentary condition, when

compared with their complex and full development in man, there we invariably find manifested the essential phenomena of the perceptive consciousness—*ideation, memory, and volition*.

Restricting the functions of the cerebrum solely to perceptive and intellectual operations, *to the entire exclusion of sensation*, Dr. Carpenter, to my mind, has fully established the composite nature of the animal propensities and social affections, and of the emotional, moral, and religious feelings of man; and has admirably shown, that in the exercise of each there is a *perceptive or ideational element*, as well as *sensorial feeling*, involved. And here it is worthy of remark, that that sagacious metaphysician, Mr. James Mill, in his contemplations on human mind, apart from all physiological considerations, had previously arrived at the same conclusions. The separation and localization, within the encephalon, of the nervous centres of sensation and of ideation, of feeling and of thought, is a real and an acknowledged step in advance on the physiological psychology of man, and it is one which has yet to be fully appreciated, in all its variety of bearings, in relation to the practice of psychological medicine.

Now, although the cerebrum, in its totality, is indisputably the seat of the organs both of the perceptive and of the intellectual consciousness, perception and intellection are not to be confounded with each other.

To perceive and to think are distinct mental processes, and they have—for they must require—distinct organic instrumentalities for the manifestation of their respective phenomena. Perception is but one and the first step above sensation; its intuitions are closely interwoven with feeling, and are often, indeed, intensely felt. It is intermediate between sensation and intellection, and it is the portal to intellectual action, for the intuitions of its faculties furnish the *pabula of thought*. But intellection is the highest, the crowning phase of mental development and introspective or reflective consciousness—the distinguishing attribute of humanity—and as to *feeling*, it finds no place in the constitution of abstract ideas, or in the processes of logical reasoning.

Perception speaks to us from *without*, and intellection from *within*; for whilst, in the perceptive consciousness, ideation is affected, in response to impressions made upon us from *without*, by virtue of the primeval harmony which exists between the perceptive faculties of the mind and external nature,—in intellection, the *mental process is different and reversed*, and the mind, separating itself from outward restraints, and impelled by the inherent activity of its intellectual faculties and reflecting powers, embodies idealized impressions and perceptive intuitions—its *inward images and representative ideas, in objective realities*. Thus symbolized or objectified, they are removed from the region

diate and perceptive experience, and exist in the mind as independent intellectual realities, and become *fixed* and *definite of thought*, and which can be placed at pleasure within or without the consciousness of the moment. In it is that the mind, impelled by the *imitative faculty*, by the hands and chisel, moulds, forms, and fashions images of objects of nature, into which it has embodied its own general ideas; and so, again, urged on and impelled forward by the imitative faculty, by means of the hands and the pencil, it creates and produces pictorial representations of the idealized—*such were the hieroglyphics of old*. But still the mind is said to have achieved its first step in the *freedom of thought* until it has created, invented, and constructed its own, phonetic or visible, for the embodiment of the intellectual; and such, as we have seen, is *language*—for, in reality, *it is objectified*."

Important, physiologically as well as psychologically, to the mind is the *distinction* between *immediate* and *representative* knowledge, and the difference in *their origin or source*. For all immediate knowledge, of whatever kind, is *intuitive*, and has its origin in perceptive experience—in the direct intuitions of the perceptive faculties; and all representative knowledge is the product of the *creation* of the mind's intellectual and reflecting

In the structure of the cerebrum there are manifestly two distinct and distinct series of convolutions. *There is a longitudinal series, and there is a transverse series*; and my own mind is under the conviction, that the *functions* of these two distinct series of convolutions are *different*; and that the former, or longitudinal series, constitutes the nervous apparatus of the perceptive, and the transverse series that of the intellectual consciousness.

Besides these two distinct series of convolutions, there is a commissural series in the cerebrum, and through the continuity of which the *intuitions* of the perceptive are brought into association with the *higher activities* of the intellectual consciousness. Such are the *internal anastomosing convolutions*, of the order of Foville, which connect the *ourlet*, or great internal convolution, with the transverse convolutions on the surface of the hemisphere—the common central organs of the perceptive, with the intellectual consciousness.

As we have seen, it has invested the *locus perforatus*, or foramen, with peculiar interest; considering it, as the *nucleus*, or starting-point, from whence all the other convolutions of the hemisphere are evolved. Nor can the fact be denied that the *ourlet* of Foville, or great internal—the primitive convolution of the hemisphere—may literally be said

to spring out of, or to be evolved from, the *locus perforatus*, and that all the other longitudinal convolutions of the hemisphere are directly connected and associated with this primitive basement convolution; forming as a whole, in the aggregate, in my opinion the nervous apparatus of the perceptive consciousness. But it is equally true that the transverse series of convolutions on the surface of the cerebrum have no direct connexion either with the *locus perforatus*, or with the *ourlet* of Foville. They are a distinct series of convolutions; and it is through a system of internal anastomosing convolutions that these transverse convolutions are brought into association with the central organs of the perceptive consciousness. They constitute, in my mind, the nervous apparatus of the intellectual consciousness, for they are essentially human; and it is only where they do exist, and in the ratio or proportion of their existence, among the lower animals that we find and detect any traces of ratiocination and of intellectual action.

Foville has traced out and demonstrated the connexions of all the other primitive longitudinal convolutions of the cerebrum with the basement convolutions of the hand; and Plate XII. of the Quarto Atlas to his "Traité Complet de l'Anatomie, de la Physiologie, et de la Pathologie du System Nerveux-Cerebral et Spinal," is "destinée montrer les rayonnements de l'ourlet fibreux dans les circonvolutions de la face interne de l'hémisphère." In this plate, with the great commissure divided in the mesial line there is seen, above the corpus callosum, a vertical section of the great internal convolution—the *ourlet* or hem of the hemisphere—its concentric circumference—surrounding it internally like a riband, and attached at each extremity to the *locus perforatus*. The great marginal convolution of the longitudinal fissure is so forming the eccentric or outer boundary of the hemisphere; and between these, crossing the internal surface of the hemisphere are displayed the convoluted branches which unite them with the anterior, middle, and posterior longitudinal convolutions of the brain, establishing the connexions, and forming a sort of anastomosis of the basement convolutions with all the other primitive convolutions, and with the *transverse convolutions*, on the *convex surface of the cerebrum*. In Plate X. is represented the external surface of the hemisphere. All the convolutions of the convexity of the hemisphere are seen running, from the convolution around the fissura Silvii to that which encircles the hemisphere, the great marginal one. The transverse superciliary, medio-parietal, and occipital convolutions are displayed, and, besides their connexion with the two convolutions of the second order, their anastomoses with each other.

The great internal convolutions, as I have said, are clear

the primitive basement convolutions of the hemispheres; and we recognise their homologues in the thin laminæ of vesicular matter which encrust the corpora striata in the brain of the fish. Forming, as they do, the concentric or inner circumference of the hemispheres, as the great marginal convolutions do their outer boundary, must they not necessarily be the primary and common portals to intellectual action—the great central organs of the perceptive consciousness—the seat of ideation, memory, and volition? For, be it remembered, that it is in the case of the fish, where their representatives are reduced to mere laminæ or crusts, covering the corpora striata, that we have the earliest instance, and the first clear and distinct evidence, of the exercise of *perception*, *memory*, and *volition*, as opposed to mere consensual and instinctive actions. These convolutions of the band constitute the distinctive and boundary lines of demarcation between the *sensory* and *perceptive ganglia* of the encephalon—between sensation and ideation. They are, in fact, the common portals to intellectual action and volitional power—the seat of *ideation*, *memory*, and *volition*. It is *here* that sensory impressions—the intuitions of all the organs of the special senses—are *idealized* and *registered*, *perceived* and *associated*, and that the *ideation* or *world-consciousness* of external existences—the things which we see, feel, taste, and smell—is effected; and it is from *here* that the mandates of the will issue. We have seen that with these central organs and fundamental convolutions are directly connected and associated all the other longitudinal convolutions in the anterior, middle, and posterior lobes of the brain, administering to the several perceptive ideational activities of man, and to the development of his composite nature as an animal and social, a moral and religious, as well as an intellectual being.

Now may it be fairly concluded, that the intuitions not only of all the special senses, but also of all the perceptive faculties, are *perceived* by us through the central organs of the perceptive consciousness? Most certain it is that we have an æsthetic sense of the true, the beautiful, and the good,—moral intuitions of right and wrong, and emotional of awe, veneration, and reverence, which come to us before all teaching,—and indeed, that the elements of all our immediate knowledge, physical, moral, and religious, have their origin or source in perceptive experience.

To determine the special functions of the primitive convolutions is the great problem of physiological psychology; and although something may be said to have been done towards its solution, much remains to be accomplished, for the problem is *virtually unsolved*. Nor can this be a matter of surprise, when we consider its conditions and requirements.

The natural history of the development of the cerebrum,

throughout the whole vertebrate sub-kingdom, is but the first step in the process, and it is one that has been or may be accomplished; but the far more difficult task remains,—a work of labour as necessary as it is difficult,—that of studying the characters, habits, and behaviour of the animals throughout the series,—their animal and social propensities, and intellectual activities, in connexion with their respective cerebral developments; and how few are there among us who possess the mental endowments and requisite qualifications, and can command opportunities, even on a limited scale, for such an undertaking. But, “*Nil, sine magno labore, debit mortalibus;*” and with such active labourers in the field as Holm, Vimont, and Frederick Cuvier have proved themselves to be, great things will assuredly, in the process of time, be accomplished in furtherance in this direction of the study of the physiological psychology of man.*

* Professor Owen has proposed a fourfold primary division of the mammalia, based upon four leading modifications of the structure of the cerebrum, under the following designations:—

1. *Lyencephala* (λύω, to loose; *εγκεφαλος*, the brain), the loose-brained implacentals, in which the great transverse commissure, or corpus callosum, is wanting—such are the marsupialia and monotremata.

2. *Lessencephala* (λίσσος, smooth), the smooth-brained placentals, where the corpus callosum is present, but the brain is not convoluted—such are the rodentia, insectivora, &c.

3. *Gyrencephala* (γυρῶω, to wind about), in which the superficies of the brain is folded into more or less numerous gyri, or convolutions, of which among the higher are the quadrumina and carnivora. The mammalian modification of the vertebrate type attains its highest physical perfections in the gyrencephala, as manifested by the bulk of some, by the destructive mastery of others, by the address and agility of a third order. And through the superior psychological faculties—an adaptive intelligence predominating over blind instinct—which are associated with the higher development of the brain, the gyrencephala afford those species which have ever formed the most cherished companions and servitors, and the most valuable sources of wealth and power to mankind.

4. *Archencephala, Homo* (Ἀρχω, to overrule). “In man,” says Professor Owen, “the brain presents an ascensive step in development, higher and more strongly marked than that by which the other sub-classes are distinguished. Not only do the cerebral hemispheres overlap the olfactory lobes and the cerebellum, but they extend in advance of the one, and farther back than the other. Their posterior development is so marked that anatomists have assigned to that part the character of a third lobe; it is peculiar to the genus *Homo*, and equally peculiar is the ‘posterior horn of the lateral ventricle,’ and the ‘hippocampus minor,’ which characterize the hind lobe of each hemisphere. The superficial grey matter of the cerebrum, through the number and depth of the convolutions, attains its maximum of extent in man.

“Peculiar mental powers are associated with this highest form of brain, and their consequences wonderfully illustrate the value of the cerebral character, according to my estimate of which I am led to regard the genus *Homo* as not merely a representative of a distinct order, but of a distinct sub-class of the mammalia, for which I propose the name of Archencephala.”†

† Vide a paper by Professor Owen, ‘On the Characters, Principles of Division, and Primary Groups of the Class Mammalia,’ read before the Linnæan Society of London, Feb. 17th, and April 21st, 1857, and in the “Journal of the Proceedings of the Linnæan Society, for June, 1857,” vol. ii. No. 5.

The facts, indeed, of developmental anatomy, comparative and man, point to the most important deductions, for they indisputably prove—firstly, that the perceptive faculties of our physical experience or knowledge, subservient to our cognition of external objects, their sensible qualities and physical attributes, the phenomena of their action, or events, and their relative relations, arrangement and number, &c., must have their “local habitation and abode” in the convolutions of the anterior lobes; secondly, that the posterior lobes, as exclusively human, must necessarily be the seat of the exclusively human affections, and administer our social affections; and thirdly, the inference appears to be legitimate, that the convolutions of the middle lobes are the seat of the personal affections of the ego, and of the social, moral, and religious intuitions—the distinguishing attributes of man.

The general harmonious accordance of these deductions with multiplied cranioscopical observations of Gall, Spurzheim, and Combe, speaks in favour of their foundation in truth and nature; and I think it may be legitimately inferred that in the primitive basilar convolutions are seated the organs of the faculties subservient to the *formation of the inferior region of the true or conscious mind*. Thus, on the lowest plane of cerebral development, and of which we may recognise the analogues in the inferior vertebrata, the perceptive apparatus seems limited to the basement or internal convolutions, with their anterior and posterior connexions; that is, to the common central organs of the receptive consciousness,—the seat of ideation, memory, and attention,—to the anterior perceptive organs, through the instrumentality of which, by the inlets of the special senses, we acquire knowledge of the sensible qualities and physical attributes of external existences,—and to those basilar organs which administer to the preservation and maintenance of animal life. The *love of life* is paramount; and around the organs of the alimentary propensity are marshalled and associated those of the propensities subservient to the defence, protection, and conservation of existence. It may, indeed, be fairly inferred that the intuitions of the special senses and their allied feelings, appetites, and instincts, form the chief and predominant part of the mental life of the inferior vertebrata, while at the same time it must not be forgotten that these, too, constitute the inferior region of the true or conscious mind, and enter largely into the complicated life of human existence. Again, on a higher plane of development, and of which, too, we may recognise the analogues among the highest mammalian and quadrumanous groups, the longitudinal convolutions are carried upwards above the lower perceptive organs, and prolonged backwards even beyond the median lobes,

and the perceptive apparatus is thus proportionately enlarged and extended.

Contrasting the endowments of the higher mammalia and ruminants, in accordance with this is the remark of Leun describing the convolutions of the Indian elephant. "Su says he, 'that all the superior convolutions, and the prolo of the great internal convolution which is united to them obliterated, then the fourth anterior convolution might be the fourth posterior,—the third to the third,—and we should have one of the groups of convolutions of the brain of the ruminant and solipedes.'" It is through these superior perceptive faculties that we rise above the bare perception of external objects to sensible qualities and physical attributes, to that of the differences and relations of things, their order or arrangement, and to the phenomena of their action, or events, with the sense of time and place. The higher individual or personal affections, too, such as the *love of self*, or *self-esteem*; the *love of approval*, and *love for others*, or *benevolence*, are brought into play; there is a still higher plane of perceptive development *exclusive of the human*, in which the towering longitudinal convolutions of the brain mark the fulness of their evolution backwards, and the nervous system attains its most elaborate and complete development. The moral and religious intuitions are the sole prerogatives of man, and they constitute an important distinction between him and the whole animal creation. In man's moral and religious attributes the lower animals do not participate. Equally destitute are they of those enduring, and endearing relations which are the charm of his existence here.

And now, may it not be fairly concluded, from the proximity and intimate association of this highest plane of perceptive development with the *transverse series of convolutions*, that the exalted, pure, and holy intuitions of the one mind are directed, guided, and strengthened by the dominating influence of the noblest faculties of the other; that through the latent æsthetic sense of the true, the beautiful, and the good, our passions always end in fruitless aspirations, but fructify; and that through them, while they control, direct, and strengthen the moral intuitions of right and wrong, and our emotional intuitions of veneration, and reverence, we will be led to see clearly the truth upon which *moral obligation* rests, and religion will be for us "a reasonable service," and ours an intelligent, voluntary, cheerful dependence upon an *all-perfect Being*, infinite in power, and goodness? It is in this association of the perceptive and elevating moral and religious intuitions with intellectual faculties that the *true greatness* of the human character consists;

fine, that from the joint operation of the highest perceptive faculties with the reasoning powers, from *observation* and *experiment*, result the creation of science and the achievements of science.

"For the proper function of reason is to create knowledge or science. The *understanding* alone can never do this. It can analyse, distinguish, form concepts, construct propositions, weave them into arguments—perform, in a word, any formal process within the data furnished to it—but it can never go beyond the barriers of its own definitions. When, however, we grasp a truth by the power of reason, on the other hand it implies far more than the attainment of a bare definition of it. It implies that we have penetrated to the centre; that we can trace its pedigree in the world both of matter and form; that we can regard it as one link in a connected chain, of which we are able to *tell* the antecedents and *foretell* the consequents; that we can recognise it, in fine, as a particular manifestation of some great and universal law, the operation of which we have learned to comprehend and apply."^{*}

In connexion with the *processes of thought*, we have evidence of an *automatic action* of the intellectual faculties, *unattended with consciousness*, designated *unconscious cerebration* by Dr. Carpenter, who was the first to bring it under the notice of psychological inquirers, and who, in support of its existence, has obtained the confirmatory experience of two of the most distinguished metaphysicians and profound logicians of the age—the late Sir William Hamilton and Mr. John Mill.

"Most persons," says Dr. Carpenter, "who attend to their own mental operations are aware that, when they have been occupied for some time about a particular subject, and have then transferred their attention to some other, the first, when they return to the consideration of it, may be found to present an aspect very different from that which it possessed before it was put aside, notwithstanding that the mind has since been so completely engrossed with the second subject as not to have been consciously directed towards the first in the interval. Now, a part of this change may depend upon the altered condition of the mind itself, such as we experience when we take up a subject in the memory, with all the vigour which we derive from the refreshment of sleep, and find no difficulty in overcoming difficulties and disentangling perplexities which checked our farther progress the night before, when we were too weary to give more than a languid attention to the points to be made out, and could use no exertion in the search for these solutions. But this by no means accounts for the *entirely new development* which the subject is frequently found to have undergone when we return to it after a considerable interval—a *development* which cannot be reasonably explained in any other mode than by attributing it to the intermediate activity of the cerebrum, which has, in this instance, *automatically evoked the result without our consciousness*."[†]

^{*} Morrell's "Psychology."

[†] Dr. Carpenter's "Human Physiology," 5th edition.

To the same effect is the following remark of Sir Benjamin Brodie :—

"It has often happened to me to have been occupied by a particular subject of inquiry—to have accumulated a store of facts connected with it, but to have been able to proceed no further. Then, after an interval of time, without any addition to my stock of knowledge, I have found the obscurity and confusion in which the subject was originally enveloped to have cleared away, the facts seemed all to have settled themselves in their right places, and their mutual relations to have become apparent, although I have *not been sensible* of having made any distinct effort for that purpose."*

And such, from personal experience, I conceive to be the common experience of every thinking mind. I have already observed† that *automatic* or *reflex action* is not peculiar to the true spinal system; but, on the contrary, that it is the common attribute of the sensori-motor, emotional, and cerebral systems, and that Dr. Laycock was the first to connect it with the cerebrum. Dr. Carpenter goes on to remark :—

"Strange as this phenomenon may at first sight appear, it is found, when carefully considered, to be in complete harmony with all that has been affirmed respecting the relation of the *cerebrum* to the *sensorium*, and the independent action of the former. Looking at all those automatic operations by which results are evolved without any intentional direction of the mind to them, in the light of *reflex actions* of the cerebrum, there is no more difficulty in comprehending that such reflex actions may proceed without our knowledge, so as to evolve *intellectual products*, when those results are transmitted to the sensorium, and are thus impressed on our consciousness, than there is in understanding that impressions may excite muscular movements through the *reflex* power of the spinal cord, without the necessary intervention of sensation. In both cases, the condition of this mode of independent operation is, that the *receptivity* of the sensorium shall be suspended *quoad* the changes in question, either by its own functional inactivity, or through the temporary engrossment by other processes."

Dr. Carpenter extends the same *unconscious* or *automatic reflex action* to the feelings of the *emotional* states, and says —

"That our feelings towards persons and objects may undergo most important changes without our being in the least degree aware, until we have our attention directed to our own mental state, of the alteration which has taken place in them. A very common but very characteristic example of this kind of action is afforded by the powerful attachment which often grows up between individuals of opposite sexes, without either being aware of the fact; the full strength of this attachment being only revealed to the consciousness of each when

* "Psychological Inquiries," by Sir B. C. Brodie.

† Vide page 402, vol. ix. of this Journal.

circumstances threaten a separation, and when each becomes cognizant of the feelings entertained by the other. . . .

"We continually speak of the 'feelings' which we *unconsciously* entertain towards another, and of our not becoming aware of them until some circumstances call them into activity; so that it would seem as if the material organ of these feelings tends to *form itself* in accordance with the impressions which are habitually made upon it, and that we are as completely unaware of the changes which may have taken place in it, as we are of those by which passing events are registered in our minds (in the memory), until some circumstance calls forth the conscious manifestation, which is the 'reflex' of the new condition which the organ has acquired." *

To the category of the *ideo-motor phenomena* belong, as Dr. Carpenter has shown, a variety of aberrant actions, bordering on insanity, of which the history of mankind in all ages furnishes us with abundant examples; and among the most recent, but not the least remarkable instances, is the *table-turning* and *table-talking* epidemic which spread through almost the whole civilized world in 1852-3; and to his able disquisition on the subject the reader is referred.†

After the mind has been pondering over the perplexities of a difficult subject of thought, that the *automatic* or *unconscious reflex action* of the intellectual and reflecting organs should, during a period of repose—that of profound sleep—*evolve clear ideas and new developments of thought* in connexion with the subject, may be truly wonderful; but is it more wonderful that during sleep, when the controlling influence of volition is suspended, a mathematical problem should be solved, than that a poetical fragment like the "Kublakhan" of Coleridge should be composed? Condorcet saw, in his dreams, the final stage of a difficult calculation which had puzzled him during the day; and Condillac, when engaged in his "Cours d'Etude," frequently developed and finished a subject in his dreams, which he had broken off before retiring to rest. Coleridge says of himself, that his fragment, "Kublakhan," was composed during sleep, 'the images rising up before him as things, with a parallel production of the corresponding expressions, without any sensation or consciousness of effort.' The imagination, it is true, is prone to run riot when the controlling influence of the will is withdrawn, and, as in dreams,—

"To combine a medley of disjointed things—
A court of cobblers, and a mob of kings."

At all times, indeed, the *imaginative* are less amenable to the dominion of volition than are the *reasoning processes*; but still

* Dr. Carpenter's "Human Physiology," pp. 609-10, 5th edition.

† Ibid. pp. 610-18, 5th edition.

we must bear in mind the mental relations of the imaginative faculty and the reasoning powers.

Out of the fanciful combinations and groupings of external objects, *new conceptions* are formed; and by the imaginative faculty, ideality, we are placed in scenes, circumstances, relations in which our actual experience has never placed us, from which, in consequence, as *new sources* of thought, *new conceptions arise*. But while these new creations may bear strong impress of the æsthetic and emotional character and tendencies of our minds, the highest efforts of the creative faculty involve equally the agency of the intellectual powers—of collection, analysis, and comparison—to achieve their loftiest triumph. And thus, while, on the one hand, *ideality* is dependent on the intellectual powers for the development of its highest sublimest flights; so, on the other, is the *understanding* indebted to the imaginative faculty for those *ideal combinations and conceptions* which, independently of their artistic value and importance, are seen to be so operative in the common affairs of human life,—“suggesting those pictures of the future which are before our eyes, and are our animating springs of action, those visions of enjoyment, never perhaps to be realized, their prospects of anticipated evil, that often prove to be exaggeration of the reality—prompting the investigation of science, that are gradually unfolding the sublime plan on which the UNIVERSE is governed, and leading to a continual aspiration after those higher forms of moral and intellectual beauty which are inseparably connected with purity and love.”

Conclusion.—In the attempt, however crude and hurried which in these papers has been made towards an exposition of some of the leading points of Physiological Psychology, which may put forward some claim to originality of view, in respect to the nervous apparatus of the perceptive and intellectual consciousness, I am free to confess that I have not hesitated to adopt the opinions and sometimes the language of others, never intentionally without due acknowledgment, and sometimes in the hope of exciting the attention of others, and arousing into activity the energy of other minds of like endowments, possessing better opportunities and more leisure for the prosecution of such an interesting and important subject of inquiry.

The establishment of the “Psychological Journal” has given a new impetus to such investigations; and the philosophy of the mind, like the philosophy of nature, is now cultivated in a manner worthy of its objects. The *phantasms* of Aristotle, the *animal spirits* of Descartes, and the *vibrations* of Hartley, have passed away as physiology and psychology have progres-

Still, we are under great obligations to Hartley;* for however unfruitful and visionary his "Doctrine of Vibrations" may be, he appears to have been the *first* in this country, and Bonnet on the Continent, who brought and employed a sound and experimental knowledge of the human constitution to the attempt to discover the physical conditions of sensation and intelligence. I am fully aware how important it is to keep in view the distinctive boundaries of physiology and psychology, and that it is only in their correlations—when certain *phenomena of observation* are found uniformly to co-exist with *certain phenomena of consciousness*—that their direct bearing upon each other can be really established. I am, nevertheless, impressed with the idea that *physiological* bears to *medical psychology* a relationship analogous to that which physiology does to pathology, so that a clear comprehension of the principles of the former appears to me to be essentially necessary for a proper and full appreciation of the abnormal and morbid phenomena of the latter. It has been well observed by Feuchtersleben, in his admirable treatise,—

"Where psychical phenomena appear *abnormal*, there is *mental disorder*, which has its root in the mind, so far as this is manifested through the sensual organs; and has its root in the body, so far as this is the organ of the mind. To search after phenomena in which these relations are revealed, with the unprejudiced eye of experience, to investigate them scientifically in every point that is of importance to the physician, and to collect them into one whole, is the province of medical psychology."†

The human mind must be studied in connexion with the material conditions of the encephalon, since it is upon the vesicular matter of the encephalic ganglia that the mind is dependent for the manifestation of all its activities in this life. And it has long been my own settled conviction that the metaphysician can make little progress independently of the physiologist, and that it is to the medical philosopher and physiologist we are to look for the most valuable contributions to the science of mind. To be reminded of what they have done, we have only to recall the names of Locke, Hartley, Brown, &c.

The expressive language of Dugald Stewart, in reference to

* "Dr. Hartley's 'Observations on Man,'" says Dr. Southwood Smith, "is a work which does honour to human nature. One feels proud to belong to the same order of intelligences with the mind which could compose it. All that relates to the Law of Association, and the whole of the 2nd volume, can never be perused without making the reader better acquainted with himself and with his duties, and more in love with his fellow-beings and with his Creator. The conclusion, on the Final Happiness of all Mankind, is truly worthy of the philosopher, the philanthropist, and the Christian."—*Illustrations of the Divine Government*, by Dr. Southwood Smith. London. 1822. Pp. 446.

† "Medical Psychology." Translated and published by the Sydenham Society. 1847.

Locke, in his admirable dissertation on the progress of philosophy, admits of general application :—

“No science,” says he, “could have been chosen more happily calculated than *medicine* to prepare such a mind as that of Locke for the prosecution of those speculations which have immortalized his name; the complicated and fugitive, and often equivocal phenomena of disease, requiring in the observer a far greater portion of discriminating sagacity than those of physic strictly so called.”

The praise which our English Hippocrates, Sydenham, the greatest authority of his time, bestows on the medical skill of Locke, affords a brilliant proof of the high estimation which his acquirements in the science of medicine, his penetrating judgment, as well as his many private virtues, had procured for him from all who knew him. In the dedication prefixed to Sydenham's “Observations on the History and Cure of Acute Diseases,” published in 1676, he boasts of the approbation bestowed upon his method by Mr. John Locke, who, to borrow Sydenham's own words, “had examined it to the bottom; and who, if we consider his genius and penetrating and exact judgment, has scarce any superior, and few equals now living.”

“*Nostri præterea quam huic meæ methodo suffragantem habeam, qui eam intimeus per omnia perspexerat utrique nostrum conjunctissimum dominum Joannem Locke; quo quidem viro, sive ingenio judicioque acri et subacto, sive etiam antiquis, hoc est, optimis moribus, vix superiorem quenquam, inter eos qui nunc sunt homines reputam, iri confido, paucissimus certe pares.*”*

In conclusion, I may reiterate what I have elsewhere said:—

“To Locke we are indebted for dispelling the mysticism of the schoolmen. Freed from the tyranny of ancient names, and regardless alike of the Stagyrte and his categories, he discarded the syllogism, and instituted a searching analysis of the phenomena of thought. In the metaphysical world, like the immortal Newton in the mathematical world, he stands forth pre-eminent. No age or nation ever produced two greater luminaries of science. They live in the veneration of their countrymen, and are borne down the stream of time with a reputation ever gathering, and with the triumphs of a distinction that will never die.”†

In this essay I have alluded to the illustrious Gall, and his able associate, Spurzheim, as being the founders of physiological phrenology; but it is to Unser and Procraska that the honour is due for having accurately defined the boundaries of the sensorium commune. And since their time, and both in this country and abroad, there have been many labourers in the field, and much

* *Vide* Lord King's “Life of Locke.”

† “Physiological Psychology.” Commentary, p. 17, *ante cit.*

has been effected towards a better understanding and a more exact knowledge of the functions and special endowments of the nervous centre of the encephalon.

We must not forget the labours and researches of Rolando and Bellengeri, and still more recently of Matteucci, in Italy,—of Magendie, Serres, Des Moulins, and Flourens in France,—of Giedemann in Germany,—and of Retzius in Sweden, &c. And while the discovery of Sir Charles Bell marks a new era in physiological science, the researches of his contemporaries, Shaw, Mayo, &c., and in our own day those of Swan, Owen, Marshall Hall, Solly, Todd, Carpenter, &c., have thrown a flood of light upon the subject. Among living physiologists, Dr. Carpenter has done more than any other man to specialize the functions of the nervous centres of the encephalon, and through comparative anatomy, by analytical reasoning and strict induction, to advance our knowledge of the physiological psychology of man.

With the labours and researches of Gall and Spurzheim the name of Mr. George Combe is indelibly associated, and will be held in enduring remembrance. His last work, "On the Relation between Science and Religion,"* is worthy of the author of the "Constitution of Man;" for, to use the words of one to whom I am under great obligations, "Every system of philosophy rests in God, as its highest idea and its final aim. To see the DIVINITY as the beginning, the middle, and the end of all things, is the culminating point of *all human thought*. Thus it is the goal, not only of providence, not only of redemption, but also of the no less divine laws of reason itself, that God *should be all in all*."†

ART. VI.—MIND AND BODY.

A LECTURE, BY ROBERT JAMIESON, M.D.,

President of the Medico-Chirurgical Society of Aberdeen, Medical Superintendent of the Royal Lunatic Asylum, &c.

THE object of this paper is to illustrate the presumed course of nervous movement concerned in the mental phenomena which are associated with the Brain. In the title, the use of the term *Phrenic*, or *Phrenical*, is preferred in the notion that it harmonizes better with physiological discussions on the cerebral functions, than does the commoner equivalent *Psychical*, which is rather suggestive of the spiritual than of the organic relationships of Mind. In the avoidance of the more ordinary

* "The Relation between Science and Religion," by George Combe. Edinburgh, 1857. Fourth Edition.

† Morel's "Psychology," p. 253, *ante cit.* One of the most valuable contributions to the Science of Mind which we have in our language.

term, however, any sympathy with materialistic views, as such has to be repudiated; and but a philosophic liberty of scientific speculation claimed as not incompatible with simplicity and faithfulness in matters of belief. The adjective Phrenic has been used hitherto in physiology as denominating a respiratory nerve going to the diaphragm, and applied originally on the supposition that that organ—the midriff, which upholds the heart itself and is so subservient in many an emotion—was no less than the seat of the Mind. It is more legitimately applicable to cerebral functions; and, indeed, as suggested by Dr. Guislain, the term Phrenology would be the best term for the science of the mental functions of the nervous system, could it be successfully reclaimed from the spurious philosophy to which it is allied—as it certainly would have best comprehended technically the observations now offered in elucidation of cerebral action.

Avocations not averse entirely to such speculations have, however, been such as tended to make them be approached quite as often from a medical as from a metaphysical starting-point rendering an apologetic prologue necessary for any inclination to impose pathological for physiological illustrations. Nor can it be less appropriate to claim, beforehand, some indulgence for bringing forward views which may seem neither very profound nor altogether new in an assembly numbering many acquainted with, and some eminent in, the departments of physiology and psychology.

The observation that the Mind is capable of becoming diseased, would indicate either its non-spirituality, its composite constitution, or that it is known to us but by machinery doomed to derangement and decay—for the only psychical disorders are perplexities and errors, or rather there is no spiritual disease but sin. Yet, there is a phrenical pathology; and its sources are two—being material decay on the one hand, or vice on the other—either of which may occasion disturbance of that relationship of spirit and matter by which manifestation of mind is possible.

The study of the human mind may be carried on in several ways—as by subjective questionings of consciousness, by observation of the actions of men, and by examination of the human organism. Metaphysicians have made most of the first way, and physiologists of the last; but a right philosophy determines each mode to be perfect, and requiring to be supplemented by the other.

In self-regarding our minds, we distinguish a set of ideas, and a capacity of regarding these. On continued introspection, it is further seen that the ideas, though a multitude, are really but a succession of individuals coming into consciousness in single file, one by one, and capable of being marshalled by the faculty which is regarding them. That faculty is the Will; and its power over the current of thoughts consists, not in creating them, but in regulating their succession, so that particular ideas

advanced, detained, superseded, recalled, or otherwise in the wish of the individual. The Will has a power succession of ideas; and when ideas move continuously, the Will, the mind is diseased.

The Will itself is not incapable of being influenced by the which it is its business to guide. It stirs through the of certain of these upon it—which thoughts are called

In a healthy state the Will is free to act or not although motives. It cannot act without a motive; but it need not the words whispered into its ear, nor use the weapon in its hand. It has a choice of action, and a choice of and when it ceases to have, the Mind is diseased.

In a natural Human Mind, then, the Will has a government current of thoughts, which, again, seek to move, but do not move the Will. Individuality is in the Will; personality is in the Will; the Will is the Man. In the same state, the Will and thought and action are neither will-ful, nor will-less; and in an insane, the Will is driven by thought, and is blinded, and overridden by disease.

Insanity depended in any case on abeyance of judgment, and a diseased condition of the volition; and what has dis-

Understanding to do with a morbid quality of Will? And Understanding have been kept far enough apart on logic pages undoubtedly; but truly, does it not seem to only is there no doing, but that there is even no thought without the activity of the personal Will? In every action of mind, thought, feeling, and volition are concerned; for, consciousness reports itself a unity, and not a muster of forces. Disordered intellect is disordered mind, and, in a diseased Will. The Will is the essence of the faculty of volition, which is at the base of all intellectual operations, and judgment amongst them. An insane idea has its origin in a defect of healthy action in the mental faculties, and is established and continued through defect in the Will, just as much as a propensity is. Abnormal excitement, depression, apathy, folly, and delusion, are phenomena of defective control of thought or action. They are all traceable to a fading personality. The individualism of the subject is less apparent—its ego is less distinct—the ego less asserted—the person is less a king over his thoughts, which are more and more influenced by external causes, and less and less the reagents of the personal mind. Thoughts possess the man; his organisms are ruled by the playthings of sensational influences, so that instead of using his ideas, he is, as Coleridge said, possessed by them. Ideas which furnish the mind, and are in its keeping, have been classified as Ideas of Sensation and Ideas of Reflection.

The former proceed from the action of the material external world on the personality, and the latter from the action of the personality on the Ideas of Sensation. Ideas of Sensation spring from two sources,—the Human Body and the extraneous body of the Universe. They rush inwards towards the conscious Brain through “the five gates of knowledge”—the Eye, the Ear, and other organs of sense; and rise up also, to the sensorium, from the penetralia of the body itself. Perhaps ideas, that can scarcely be called sensational, may be born with the Brain itself, or descend to it from the universal Pneuma by which it is overarched; * but to speculate so were less metaphysical than mystic, and more imaginative than either. Without adopting such fancies, probably we should take too narrow a gauge of our Ideas, in limiting their origin to the impressions on the nerves of the senses, for there is the certainty of many of our feelings being either morbid or healthy, in harmony with states of welfare, or the reverse, the hidden chambers of the animal economy, where there is neither eye, nor ear, nor any accredited ambassador from that distant seat of government, and where even a muffled sensibility is very doubtfully recognised. Save as general feelings of comfort, cheerfulness, and self-assuredness, it would be difficult to condescend on any detail of such ideas, under ordinary corporeal conditions; but while the psychologist might scruple to declare them, the observer of the mental phenomena of disease has no hesitation in pointing to the trepidation of the palpitating heart, the moroseness of the disturbed liver, and the poltroonery of the hysteric mobility of lowered sexual vitality, as evidentiary of that field of sensation that may lie within the barriers where the external senses are placed. Nay, some speculations have been rested at the organs of the body, but have wished to establish the recognition of a communion, through the living blood, of the conservative fluids of the economy with the human influences of the Brain.

The external world, both of foreign material objects and of the somatic phases of the individual, acting brainwards, constitute but the receptivity or passive voice of Mind. There is an ability of reacting on the external world; and in the mind there are ideas of Reflection, as well as of Sensation. It possesses a power that rules the ranks of ideas as they rise, or even recalls them from the limbo of thought into which they sink, so that they move again like ghosts of themselves across the cerebral tracks, or stir up in a resurrection transcending all sensational experiences. It is not our object, however, at present, to demonstrate the reflexive capacities and activities of mind, and to dwell on such phenomena as Memory and Imagination abstractedly from their

* Gardiner Wilkinson.

organic relationships, and, therefore, let us hurry forward to the consideration of the corporeal machinery connected with phrenic action, and the physiological rather than the metaphysical view of the subject.

For the production of the Human Mind, phenomena are observable pointing to a union of the spiritual with the material, in the way of sympathetic, parallel, synchronous, or, as is most likely, unnameable and inscrutable relationship and communion. In truth, we do not know Mind, but only Humanity. A mere consciousness of ideas of sensation and reflection could never have found its way into a nosology, or into an hospital, or been treated or mistreated as efficiently by a Doctor in Medicine, as by a Doctor in Philosophy. Mind has a recognition in practice of Physic as well as in impractical Metaphysics. The only mind we know at all, and can seek to investigate, is the Human Mind; and it is self-asserting and individual in others, quite as much as it is conscious in ourselves. There is a faculty of Will, which in us compels acknowledgment of itself by our fellows, and in them a recognition by us. I know my own faculties subjectively, but those of others only sensationally. Of me, none but I can have any knowledge, save of those things which my body does. Subjective knowledge has an incompleteness in it practically, and mere observation is lacking in profundity. We know not Mind but Humanity, and that inefficiently. We know nothing of each other but the telegraphing of our muscular systems, and the indicia of their working, as recorded on matter around us. *Ego* and *non-ego* are not self-limited and apart more than are *ego* and *tu* separated from absolute observation of each other by a hedge of muscular movement. Sensation, perceived in others, is but motion perceived; will, but directed movement; and emotion, but physiognomical expression. For example: What do we know of anger, but that it is a peculiar action of the facial muscles, with, probably, associated violence and malevolence of deed; of fear, but that it is tremor, flight, paralysis, and so forth; of talent, but that it is the successful result of endeavour; or of genius, but the exhibition of new power? So, to harangue from the pathologist's pulpit, in relation to disease of mind, lunacy is simply morbid action, insanity nothing more specially mysterious than sorrowing vitality is mysterious—only a sick man making an unhappy self-assertion of absurdity, and requiring the attention of the physician and pharmacy but to reform his gymnastical deportment, so that he shall, peradventure, once more appear to be, and be denominated wise. Medico-legally, as you may be aware, it does not signify at all what hallucinations a man has, but only what delusions he believes in and obeys to do folly; and, therefore, that it is the doer of foolish things that is lunatic, and only the madman that is insane. The Fatuus

and Furiosus, only they, are the freemen of the asylum, and the freedmen of the social world.

From such views it may be stated, that a man's Mind is a movement betwixt feeling and action—a spiritual intervention betwixt organs of sense affected by impressions of matter on the one hand, and matter affected by muscular action on the other. Conversely, Body is a substantial nexus of feeling and willing.

All phrenical action, from the lowest manifestations in the animal world to the highest self-consciousness in man, is educed from animal machinery by the traction of a loving Spirit which no human science has apprehended.

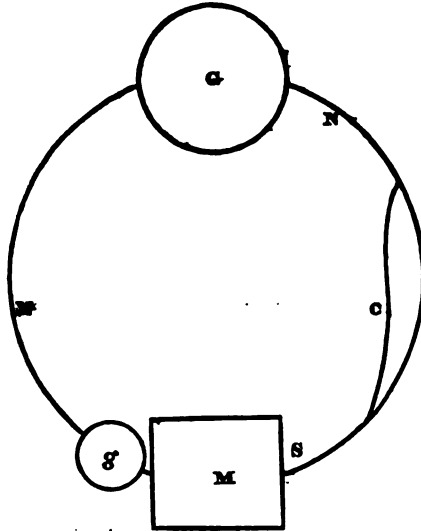
We seek but to understand something of the phreno-corporeal relation from the corporeal side.

So far as physiology at present guides us, it would seem that the manifestation of mind in the human body, and indeed phrenic action under every circumstance of life, is dependent on the intervention of the grey nervous cell between spiritual influence and perceptible matter. To affect thought, matter must act through this channel; and to influence matter, mind must start forward from the same intermedium. In phrenic action these cells wax and decay, and are renewed, by an unseen stimulus acting on a living organism, whose vital capacity of so responding has been thought to be associated, in a more special degree, with the phosphoric element of nervous tissue, than with any other of its chemical constituents.

In *Sensibility*, which is the base of all phrenic manifestation, and the root whereby the blossom of mind is nourished from the soil, the grey nervous tissue, which, in the form of a cell-nucleus, terminates every sensitive nerve, is impressed by the contact of an external object. This impression is conveyed through a susceptible track of white nervous matter, called a nerve, to a mass of grey neurine—a mass of nervous cells—called a ganglion, where the inward moving impression loses its character, and is reflected outwards as a reacting force. This force is conveyed from the ganglion also by a nerve, which, however, does not end in grey neurine, but in muscular fibre. The muscle, thus quickened, indicates the establishment of sensibility by contracting, and thus more or less directly reacting on the external matter, whose impression was the beginning of this chain of vital action.

Such is the apparatus of sensibility; though not seen so disguised in simplicity, but always elaborated; the cell-nucleus and its adjuncts being surrounded by structures framing organs of sense, and the opposed contractile fibres being made up with fulcra and levers into animal forms. Sensibility need have no connexion with Mind. It is not mind; but it always undates

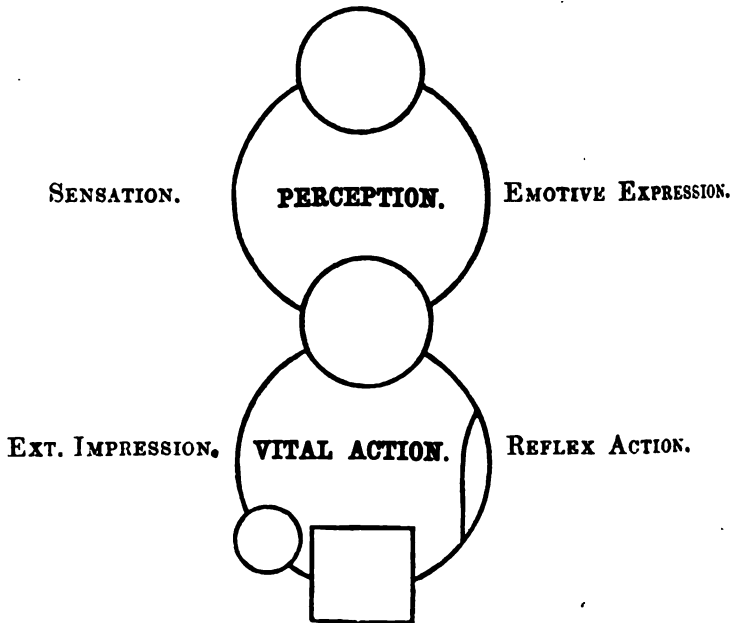
it. It is sensation without consciousness; and is, simply, what is known to physiologists as irritability, nerve-action, spinal or reflex action, a phenomenon in living bodies which is not phrenic, and for which no cerebrum is required.



M. Matter. g. Termination of sensitive nerve: organs of sense:
N. Nerve: white nervous tissue. G. Ganglion: grey nervous
tissue. C. Muscle. S. Instrument of reaction: skeleton, &c.

The above is a representation of vital reaction, not of sensation. Sensitive nerves are; it is true, employed; but before they can be the means of conveying conscious sensation, they must form part of a more complex nervous arrangement. The apparatus must be enlarged in the ascending direction by addition of grey nerve-tissue; so that when the sensitive nerve is affected by external stimulation, the impression conveyed along the nerve, after reaching the before-mentioned ganglion, instead of being, as formerly, immediately indicated outwardly by reflex action, travels upwards to a second ganglion, where the impression becomes a *Perception* or conscious sensation, and its external manifestation in the muscular system an expression of *Emotion*, and an indication of pleasure or pain.

The following diagram represents the machinery required for the commencement of phrenic action, and the establishment and indication of consciousness. Mind was not indicated before this development was given; consciousness was not born, and no cerebrum was required. As yet this child is but infantine; and



the phrenic capacity represented demands but a small brain, made up but of the Thalami Optici, Corpora Olivaria, and sensorial ganglia, and of the Corpora Striata, and motor ganglia.

Emotional acts, though the outward indication of sensation, do not express merely the perceptions derived from the five external senses, but also those less fully apprehensible which rise out of the common sensation of the body—such as hunger, thirst, fatigue, and many other feelings which are peculiarly liable to be morbidly expressed. When it is well with organs, tissues, and fluids, in the hidden chambers of the body, there will be a declared manifestation of cheerfulness, activity, and natural affections; when otherwise, more probably melancholy, apathy, and deranged impulses. Not that such conditions are in every case so generated, even when they are the undoubted offspring of bodily disease, for their origin may be at the nervous centres as well as at the nervous extremities.

Before going on further with this synthetic exposition of phrenic action, and the demonstration in a diagrammatic way of its machinery, it has to be stated, what may not be indicated by signs or symbols, that the mind is more than a recipient and exponent of sensational impressions and emotional intercourse. While the stimuli which pass inwards as sensations are trans-

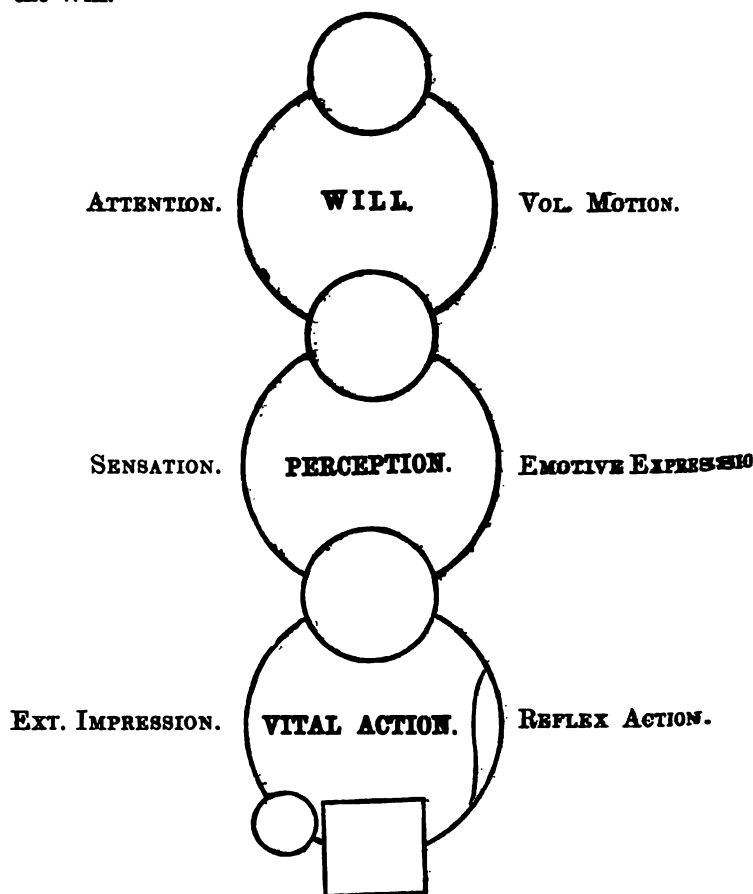
d outwards as muscular force, they have left something id, which has been called *experience*, in the charge of a capacity of retention in the nerve tissues, named *memory*, which is reproducible in *recollection*. In what way soever tions are conveyed onwards from the terminations of nerves gh nervous track to nervous track, from ganglion to ganglion—whether by vibration, current, or in whatever unknown -this current, or its effects in the nervous tissues, would seem reproducible therein—not merely by the renewal of the al stimulus, but also by an internal excitation passing wards to the seat of sensorial perception from regions higher those to which we have yet inquiringly ascended. The ion is again felt, and, perhaps, even its physical indications ested by its corporeal machinery. I repeat: the ganglia of tion and emotion are capable of being influenced by a ent stimulation generated internally, and transmitted to from parts higher up in the nervous scale, and which causes to reproduce and re-act whatever impulses had come to them without. The ganglia of perception have a valuable trea- n them in this way, but they have no mine wider or pro- per than their experience, however importunate may be the g of imagination.

human brain being more than a mere sensorium, is not nated or domed by the ganglia of perception; and conscious ion is not therefore manifested outwardly in expressed on as the necessary sum and completion of phrenic phe- na, but travels upwards, from the domain of perception, to ia which are superimposed in position, and thereby dominant hority. The impression, which had become a part of con- ness in perception, passes along a nervous track to the ia which form the seat of the *Will*; and when the force is t diverted externally to the muscular system, it is now made ent, not in the guise of instinctive expression of pleasure or nor as simple reflex action, but as voluntary motion or n.

n nervous superaddition now referred to is the proper ing of the organism related to the operations of the Human . Unless the original stimulus be powerful to produce a impression, and the impression distinct enough to be oed to the seat of sensation, and its perception be successful ulating volition, it does not contribute in any degree to rishing of the mind. The Will is the gate through which must be ushered to become objects to the personal con- ness, and is the outlet by which go forth all the manifesta- of individualism. The fundamental intellectual process is we term the *Attention*—which is but the potency of the

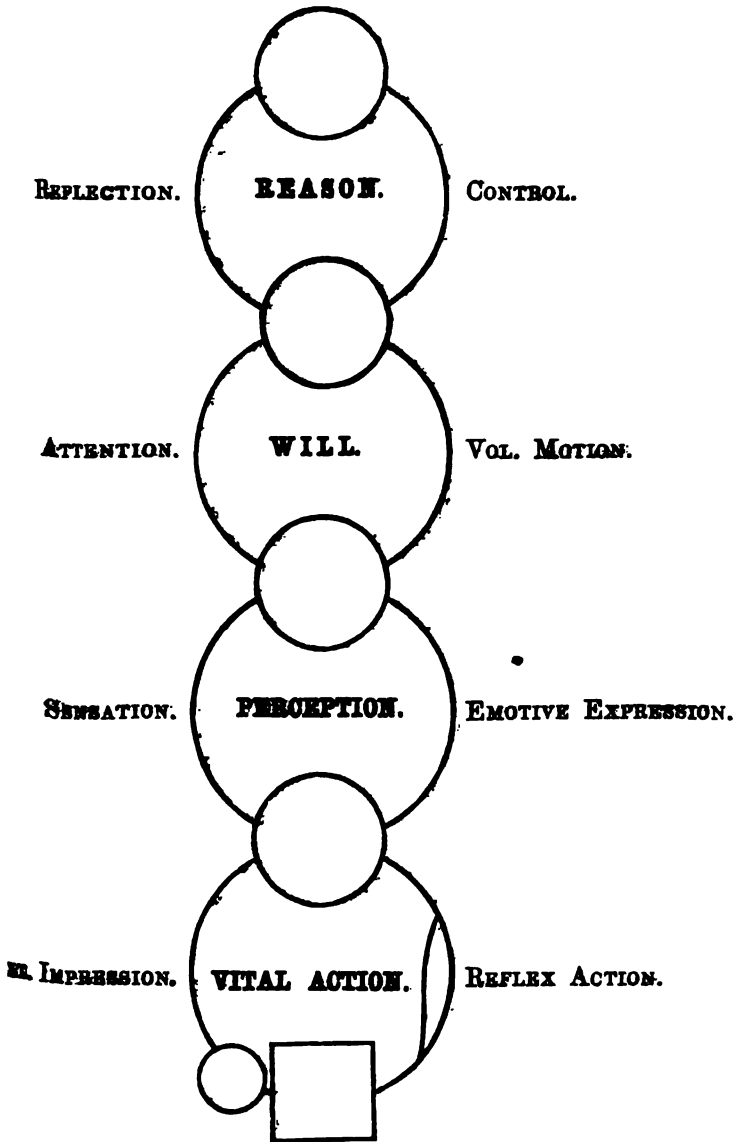
Will over perception; and the base of all power is the guiding rein by which volition holds muscular contraction, and composes mere spasm and convulsion into resistance and endeavour.

There are no mental powers, but only a mental power—viz, the Will.



Speculatively, it is a power governing the current of thoughts, and evolving from their movements and associations the various operations of retaining, recalling, combining, alternating, and so forth, exhibited in recollection, fancy, judgment, and other so-called *faculties* of the mind; while, practically, it gives a character of emancipation to forces which without it were fixed in mechanical-like formality both of direction and degree, instead of being outwardly exhibited, variously modified by the fiat of the

internal Will, or even being entirely suppressed within the consciousness of the man himself, were such latency the dictate an advised and instructed volition.
The seat of the Will is in the hemispherical ganglia of the
sin.



The nervous impression, which we have traced as an assumed current from point to point, as becoming successively sensibility, sensation, and volition, and as exhibited in reflex muscular action, emotive expression, and voluntary motion, may rise yet higher than the region of the Will, and have more transcendent and excellent manifestation carried onwards, by reference of the Will through the channels of *reflection*, to the stage of nervous organization and development, where mere reflex movement—which had first become conscious, and next voluntary—may yet become rationally controlled before outward declaration.

Ascent carries forward the nervous current, in the act of reflexion, through the ganglion of *Reason*, to be displayed externally as voluntary muscular motion rationally controlled, or it may be rationally suppressed. The establishment of an authority higher than volition leads us to a brief consideration of the relation of humanity to freedom and fatalism. Humanity is the manifestation of the Will of Man. The will acts from *motive* and cannot act but by the influence of motives. These are often denominated *lower* or *higher*. What do these terms mean in the physiology of phrenical action? They mean, that when motives are such as to be called lower, they are ideas coming from ganglia lower than the seat of volition in the phrenic organism; and that when they can be called higher, they are the judgments of Reason, or the controlling influence of ganglia elevated above that of the Will. The lower motives are independent by the birth, and tyrannous and unrestrained by inclination. They have a guaranteed access to the Will, but the Will need not obey them. They are the subject-matter over which the Will is king. It is the Will that says amen to desire; instead, however, transmitting its tumultuous urgency onwards to a termination in deeds—instead of converting sensational impulses into motive force—it may direct the current upwards, so to speak, into the sphere of Reason, and first regulate its expression by controul. The higher motives are not so chartered; they do not urge the will unsought, as do the lower motives, but come only when called for by the Will, and act only when thus permitted. The degree in which the Will is subjected to the higher motives is dependent on the phrenical habits of the man himself. His Will is free. It may obey the lower motives, but it may refer them to the judgment of the Reason and disobey them, preferring the approval of this and such authority to the gratification of sense or desire. Necessity compels to action, but does not govern the deed.

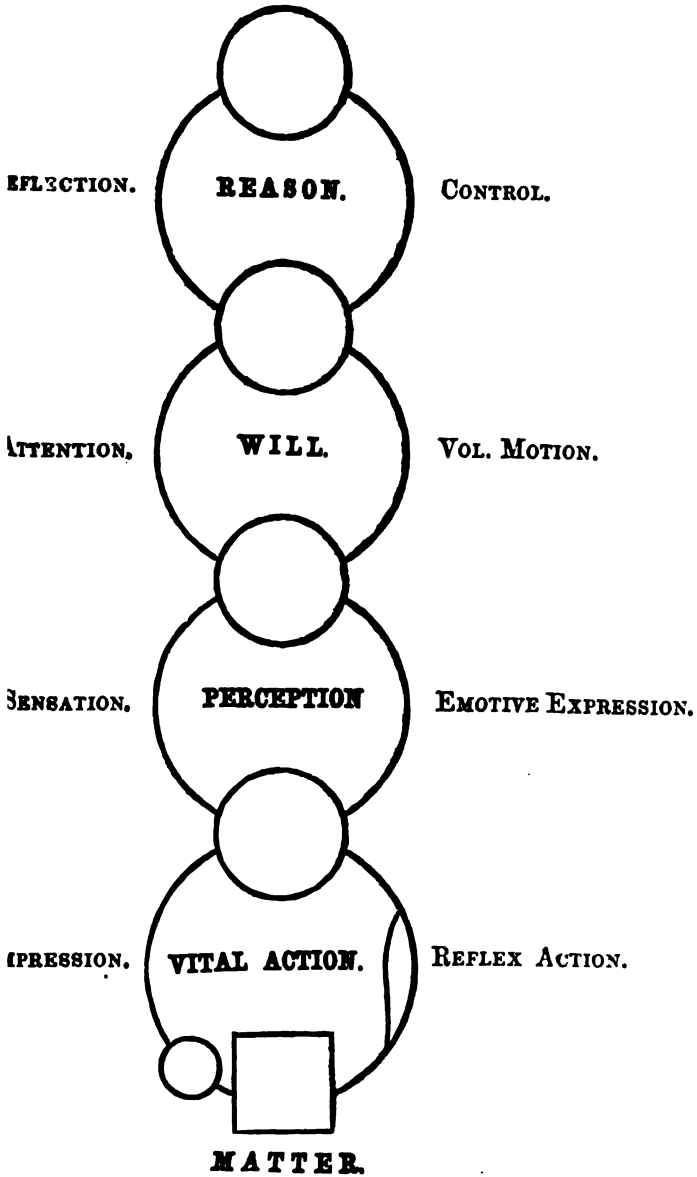
The Will is the fulcrum of all muscular action that is phrenically instituted. All subordinate points of vitality in cerebral function—all sensibilities—all their corporeal expression—for

SPIRIT.



FAITH.

LOVE.



but footsteps of the mental throne on which the volition stilled as king; and aught higher, as the Reason, whether intuitive or intuitional, is but an oracle which the king cultivates, just so far as he chooses to seek piety and wisdom.

Here, in the hemispheric ganglia of the brain, is the end of the nervous chain, and the completion of the animal machine or corporeal apparatus of mental action: not that we are to believe that on this mountain we have but to sit down, and look back to the clods in the valley from which we have arisen, or ruminate in self-absorbed regard on the fortunate additions for enjoyment to be observed in the body, and the work which carbon and water are capable in a human frame; we leave the intelligence in the act of aspiring; and here, where anatomical investigation becomes amanuotia, the physiologist has to be dumb, our diagram must terminate. We believe that from this Jacob's ladder the Reason takes itself, and soars upwards by *Faith* to a Spirit acting downwards towards humanity in *Love*.

The steps through which we trace the growth of the mind are—from organic movement to consciousness, from consciousness to volition, from volition to reason, and from reason to the capacity of acknowledging a guiding power beyond the limits of organic life. We have looked upon phrenic action, commencing in mere reflex action, and carried upwards successively through instinctive manifestation, voluntary motion, and rational action, to the development of a will capable of acting in unison with a holier will.

Humanity is the highest phasis of the relation of Spirit to Matter in this world, and is the Human Mind for all philosophical apprehension of psychology. At the base is a vitality simply uterine; above that, merely animal; farther forward, foolish; above this, diabolic; and, only when transcending the intellectual power, graduating at Humanity, and being capable of a life which may blossom as Christian in this world, and sow the seeds of a development that will yet be more like, and of a life that will be immortal in heaven.

ART. VII.—ON DIPSOMANIA.

BY DAVID SKAE, M.D., F.R.C.S.,

*Physician to the Royal Edinburgh Asylum for the Insane.**

Read at the Medico-Chirurgical Society, January 20th, 1858.

Dr. Peddie read his very interesting and valuable paper on it to the Society, at its last meeting, I intended to have made observations; but the lateness of the hour when the meeting concluded and my seniors in the profession had spoken, deterred me from hazarding rashly, in an unpremeditated and hurried manner, opinions upon a subject of such difficulty and delicacy, and induced me to forbear, and to offer these opinions to the Society in the form of a written communication. This communication I beg you will consider not as a reply to or a criticism of Dr. Peddie, but as a sequel to his paper,—as a contribution to the solution of the difficulties of dealing with this disease, which may occur to one occupying *my point of view*, as superintendent of a large asylum, where I have had considerable practical experience with all the varieties of the disease, and the difficulties of treating it, for a period of nearly twelve

years to me that very much of the difficulty of dealing with the question of the isolation of the insane drinker from the world appears, when we have a clear and precise idea of the distinction between the ordinary drunkard and the insane drunkard, and between the habit and the disease. To have this, and to estimate properly the mode of treatment and the legality of restraint upon him, we must be familiar with the differences we meet with in the habits of sane drunkards, and the various features which distinguish the numerous groups or varieties of those who are insane because they cannot help it,—from an uncontrollable and morbid appetite.

In risk of repeating some of the valuable descriptions given by Dr. Peddie, I must briefly point out a few of the distinctions which exist, in order to clear the way for the remarks which I have to offer on the treatment of this disease.

There is a drunkard who gets drunk at the festive board—on special occasions for getting conveniently drunk without interfering with his ordinary occupations—who takes a few days' rest at a time, when he has plenty of money, and returns to his usual work and employment when he has finished his superfluous drinking, his "ramble," or "spree," as it is called among the

* Dr. Skae has kindly permitted us to transfer to our pages his valuable paper on this subject, which appears in the 10th number of the "Edinburgh Medical Journal."

humbler classes in Scotland. Some men, on the other hand, get systematically and regularly drunk every day after dinner, some every night before going to bed, and will perform their daily duties with propriety and efficiency. There is a large class who drink continuously, and consume large quantities of stimulants, and seem to have a constant craving for them, which they satisfy by constant potations; yet they do not come under the denomination of insane drinkers; they exercise a certain amount of self-control, a sufficient amount of restraint upon their appetites not to allow the quantity which they drink to affect their aptitude for business, or driving a good bargain. These are the decorous drunkards of society, and some of them are perhaps the hardest drinkers of any.

The effects of intoxicating drinks vary very much, as is well known, in different individuals, according to the temperament or some peculiarity in the constitution. Some men get hilarious, and others stupid; some become amorous, and others maudlin in their cups; and some, again, become pugnacious, and even dangerous. It has been often observed, that men who have suffered from severe blows or injuries of the head become very violent, and even maniacal, when intoxicated. Such persons as these frequently come under the notice of the legal authorities, for acts of violence committed while intoxicated. But in these cases, if the individual has voluntarily become intoxicated, knowing that in that state he is liable to be dangerous, he is justly held amenable to punishment for acts of violence committed when drunk. The responsibility of a person of this kind for any of the consequences of his getting drunk, knowing what *may* ensue, has been compared to that of a person firing a gun out of a window into a crowded street, who would unquestionably be punished for the effects which resulted from his folly.

It would be a tedious task to describe all the different effects and kinds of drunkenness. It may suffice to say, that in all cases of mere drunkenness, the characteristic feature, as distinguishing them from insane drinking, is the preservation of the power of *self-control*. In the mere drunkard, there is a method in his madness; it is a systematized or regulated, or at least a voluntary habit. A morbid craving may be, and is generated, after drunkenness becomes a habit; but it is regulated, as to the time, and mode, and extent, and frequency of gratifying it, by certain considerations,—such as a regard to outward decency, to the duties of life, or to the calls of business. And it continues to be so regulated, perhaps by a very low standard, and by one which is gradually made lower and lower; but still the habit is regulated and controlled as long as the person is *merely a drunkard*, and until the habit degenerates into a disease.

The principal, the diagnostic feature of this *disease*—that of the drinking, dipsomania, or oinomania—is, on the other hand, the absence or loss of the power of self-control or self-restraint. Persons affected with this form of *moral insanity* do not drink from the pleasure which the social board affords, but, on the contrary, will not unfrequently preserve a certain amount of decorum while in company. Neither do they drink for the pleasure which the wine gives them; they will drink any kind of intoxicating stuff. Nor do they drink at a convenient time and place, and only occasionally; they drink as often as they can, whenever they can, and as much as they can; their craving for stimulants is incessant and uncontrollable; no considerations of self-respect, no regard to public opinion, or common decency, domestic ties, or religion, or the certainty of impending ruin, degradation, or even the fear of death, can prevent their drinking when they can drink no longer. Such persons will often deplore their fatality, their inability to control their desires, and will say, with tears in their eyes, as some have done, that if hell were coming at one side of them, and a bottle of brandy standing at the other, they would drink, although the next moment they were to be thrown into the bottomless abyss. In fine, such persons drink because *they cannot help it*; and if they really *cannot help it* they must be regarded as no longer responsible agents—as therefore insane, and proper objects for being restrained and protected against themselves.

The *loss of self-control* is, indeed, the most essential condition in almost all cases of insanity. The most constant symptoms of insanity are those referable to altered affections, perverted desires, and morbid propensities. *Delusions*, so much dwelt upon by some writers, particularly among legal authorities, as essential to insanity, are but its accidental concomitants, like hallucinations of the senses. Every form of madness, from acute mania down to dementia, may be met with where there are no delusions. In mania, there may be a morbid exaltation of all the emotions and passions, over which self-control is entirely lost, and the individual riots in unrestrained laughter, singing, anger, destructiveness, and violence. The loss of control may extend to the thoughts and ideas, which succeed each other with extraordinary rapidity, and give rise to incessant talking and incoherence. In partial insanity, one particular emotion or desire may be morbidly exalted, and we may find a deep melancholy and depression without any delusion—a hopeless but abstract gloom, leading, by the total overthrow of the power of self-control, to an act of suicide. There may be, as has been fully established by numerous well-authenticated cases, a morbid impulse to destroy life, without any delusion; an impulse over which the affected person loses all control, and

under which he commits some homicidal act. The morbid excitement of the sexual appetite only becomes insanity when the person loses self-control, and the victim of satyriasis or nymphomania outrages all considerations not alone of morality, but of ordinary decency and the common instincts of humanity.

It is, in fact, the loss of control over morbidly excited passions, whether of an exalted or depressing kind, that constitutes *insanity*, and distinguishes it from ordinary excitement or depression. So it is with insane drinking; it is the loss of control over the morbid appetite that distinguishes it from ordinary drunkenness, and constitutes it a form of *moral insanity*.

I prefer the term moral insanity, in describing this disease, to the terms *oinomania* or *dipsomania*, for three reasons: *First*, because neither of these names conveys a correct idea of the disease, which is not an insane thirst, nor a thirst for *wine* only, but may consist in a morbid craving for stimulants or narcotics of any kind; *Secondly*, because it is under the denomination of moral insanity that this disease is recognised by the Commissioners in Lunacy for England; and, *Thirdly*, for the most important reason of any—namely, that the craving for stimulants is generally only *one* of many symptoms of moral perversion which characterize the disease, and which it is of great importance to recognise, as they render the duties of the medical attendant comparatively easy, when they are met with in any particular case.

Of these other symptoms of moral perversion, the most common is the habit of lying. In almost all cases of this variety of moral insanity, there is a total disregard for truth. Such persons are singularly mendacious. They will resort to every possible device to procure stimulants, to excuse their conduct, to deceive their friends and medical attendant, and will display an ingenuity and fertility in deceit which is truly marvellous. They will become faint, or be in agony with toothache, or tic, or cramp in the stomach, or colic, or dysmenorrhœa, or they will take diarrhœa or hæmorrhage, and be on the verge of dissolution, unless brandy, wine, or opium is administered. They will pawn every available article of dress, or furniture, or jewellery. They will borrow from servants or cabmen. They will get whisky smuggled home with their clothes from the tailor or the laundress. They will evade the most vigilant surveillance, and tell the most deliberate falsehoods in their attempts to deceive, solemnly appealing to God for their truth. When shut off from the ordinary sources of stimulation, they will sometimes resort to almost anything in order to relieve their craving. I have known a young and delicate lady, after being prevented getting wine or spirits, and deprived of red lavender, lavender water, and eau de Cologne, take creosote, vinegar, vitriol, and tobacco.

Allied to this disregard of truth is the total denial, often in-

on by such persons, of their habit of over-indulgence. I very frequently disavow most solemnly having ever the bounds of strict temperance in their use of s; and, if admitting at all that they ever have been the : drink, they will blame some other person or circum- the cause of it. The wife will blame the husband; and, the accident of meeting on one particular occasion , or being engaged in some circumstances which rendered lable. And in this way, one or two undeniable overt ntemperance are conceded, when it cannot be avoided, habit or the loss of self-control is generally indignantly cept at moments of remorse.

panying this disregard of truth, there are often other is of moral perversion in the insane drunkard, such as icentiousness, or a propensity to theft, or a delight in g quarrels and creating mischief by leading other parties ble.

this disease is very frequently met with in persons g certain mental peculiarities which are natural to them , congenital. It is by no means uncommon to find it tsself in youth who have always been regarded as having out them, to use a vernacular phrase. They have never gress in their education like others of their age—have haps, been able to learn to spell, and so forth; and, illiterate and ignorant when they come to manhood, are y vain, and at the same time credulous and silly. Or, ey have been characterized, even from childhood, by rversities of disposition, such as a delight in cruelty ls, disregard of personal appearance, love of solitary and s destructiveness, extreme obstinacy and selfishness, or a nd mutinous temper upon slight occasions.

, the disease is very frequently hereditary; and it will be i inquiry, that a grandfather, or father, or mother, or one brothers, have died of delirium tremens, or have other- wn the fatal propensity. The constancy with which the y predisposition to this disease is transmitted is most le, and, in a vast majority of cases, can be traced either the maternal or paternal side of the family.

ustrate the truth of these remarks, I have analysed the '86 of the cases of this form of moral insanity which I l under my care, of which 20 were females and 66 males. s the result of these comparisons, that of the 20 females presented natural peculiarities in their mental constituting either of weak minds, of very violent and incon- passions, or subject to hysterical attacks of great combined in some instances with great moral depravity.

Of the males, 30, or nearly one-half, were naturally of weak mind, or presented some mental peculiarity, such as silly vanity, general depravity of disposition, and, in some cases, considerable talent, but combined with eccentricity of some marked peculiarity. In both sexes, the disregard of truth was a common feature in most cases.

In regard to hereditary predisposition, it is difficult generally to trace this in a public hospital, partly because many cases come in without any information regarding them at all, and partly because the friends, when they have friends, are generally very solicitous to deny or conceal the existence of a hereditary taint in the family, and will not unfrequently positively deny that any other member of the family is insane, while, perhaps, at the time there may be a mother in one asylum and a sister in another. Notwithstanding these difficulties, I find the hereditary predisposition distinctly traced in 32 cases out of the 86.

Of the females, this hereditary taint was found to exist in 10 out of 20. One had a brother insane; one a mother half-witted; one had two cousins who died of intemperance; another had a father and mother who were both intemperate; another had a father, and another a father and brother, who were hard drinkers; three had mothers who died from the effects of intemperance; one had two sisters, both prostitutes and drunkards, one of whom committed suicide; and another had a brother, father, and mother all intemperate, and the latter of whom committed suicide.

Of the males, two had brothers affected with the same disease in the asylum, and three brothers who had the same disease, but were not sent to any asylum; one had repeatedly attempted suicide, and inherited, with his whole family, a loathing of life which at times affected all the members of his family. Four had brothers who suffered from other forms of insanity; two had each two brothers insane; three had insane sisters; two had drunken fathers; one a drunken father and brother, and one a father and grandmother drunkards; and of several others it was admitted that insanity was in the family, although the relationship of the members affected was not ascertained.

Before discussing the question of treatment, and isolation in an asylum or special establishment, it is necessary to complete this sketch by enumerating briefly the varieties of this form of moral insanity, and the causes which induce the disease.

Its varieties group themselves naturally into three divisions,—the *acute*, the *periodic*, and the *chronic* forms of the malady.

Under the head of *acute*, I would include all those cases of incontrollable drinking which occur to persons of previously temperate or regular habits, but in whom this insane craving has been generated under the influence of some accidental cause,—

such as the novelty and excitement of a new sphere of duty, and the temptations of new associates and habits, all combining to lead to intemperance; or the depressing effects of some overwhelming calamity, or of some debilitating accident, or disease, or other agency, such as excessive hæmorrhage, protracted nursing, fever, and such like. It is well known that the use of stimulants, begun and indulged in under any of these circumstances, has gradually merged, in many instances, into an inordinate and uncontrollable craving, and an insatiable and destructive use of them.

Cases of this kind are, however, if taken in time and treated judiciously and firmly, generally curable without recourse to any step for depriving the patient of his personal freedom.

Periodic or recurrent attacks of the disease are generally dependent upon some constitutional or hereditary peculiarity. Sometimes they occur at the critical age in females, and preserve a periodic form coinciding with the menstrual period. Sometimes they arise from injuries of the head. In many cases the cause is obscure.

Cases of this kind are less amenable to treatment than the former, particularly where there is a hereditary predisposition. They hardly justify confinement, however, or isolation from society. Where this has been tried, it has generally been found that the uncontrollable impulse comes back at its accustomed period, when the imposed restraint has been removed. Nor does this form of the disease interfere materially, in many cases, with the duties of life. Many individuals have distinguished themselves in literature, or in professional or mercantile life, who have been known for a long term of years to retire periodically into the privacy of their own chamber, and, after indulging this morbid appetite to satiety for a week or two in their voluntary seclusion, to reappear again on the stage of life, and pursue their usual avocations with credit and success. Such cases are perhaps rare, and more frequently it happens that the recurrent or periodic form gradually degenerates into the chronic variety of the disease, the intervals becoming shorter and the attacks longer, until the intervals cease altogether, and a chronic disease or a fatal issue ensues.

It is the *chronic* form of this disease which is the least curable and most troublesome to manage. Here the craving for stimulants, brought on perhaps by indulgence and irregular habits, operating upon a constitution hereditarily predisposed, becomes instant, insatiable, and uncontrollable; and the daily or hourly indulgence suffers only now and then a temporary check by illnesses induced by it, by attacks of delirium tremens, or outbursts of mania.

I believe it is agreed by all parties, that this form of the dis-

ease can only be treated effectually by prolonged and complete abstinence from all stimulants. This has been attempted in two ways: First, by boarding the patient in some house where, in consequence of its remoteness from places where ardent spirits or other stimulants can be procured, or where, by the stringent rules of the house, and the watchfulness of those connected with it, a barrier may be placed against attempts to gratify the morbid craving. Of the first kind is the boarding-house mentioned by Dr. Christison, in Skye, where for many years patients of this kind have been sent. Of the latter is the House of Refuge in Edinburgh, which has been used for a number of years as a reformatory school for patients of the humbler classes affected with this disease. In addition to these houses, a number of individuals—clergymen, medical men, and others, in different parts of the country—have been in the habit of taking boarders affected with this malady, with the view of curing them. In none of these places can the principle of treatment be efficiently carried out. The parties having charge of the patients have no legal authority to detain them, or to interfere with their personal freedom; and the consequence is, that they either leave before a sufficient length of time has elapsed to do any good, or they evade the surveillance under which they are placed, and manage to keep up the craving for stimulants by a constant system of smuggling and secret indulgence. It consists with my experience that this has been the result in all the institutions and houses of the kind mentioned, which I know of, in this country; and I believe every one will agree with me, who has had much experience in the treatment of this deplorable malady, that, in its chronic and confirmed form, complete abstinence from stimulants can only be effected by depriving the patient of his personal freedom.

In the present state of the law, this can only be done by obtaining a warrant for the detention of the patient in an asylum for the insane. And this method of treatment is now very commonly adopted in well-marked and obstinate cases. I think some medical men, particularly in the country and in provincial towns, still entertain doubts as to the propriety of granting certificates of insanity in such cases. But the scruples of such are gradually wearing away, as the disease becomes better known and more fully recognised as a variety of moral insanity. It is now found, accordingly, that in all the asylums of England, Ireland, and Scotland, such cases are constantly admitted, and regarded both by the medical superintendents, the Commissioners in Lunacy, and the sheriffs of our counties, as the proper objects of asylum restraint.

Lest there should be any doubt in the minds of any one as to the legality of certifying such patients to be insane (and I think some doubts were expressed by Dr. Peddie, and by others, in the

discussion which followed his paper), I may mention that in one or two cases sent to the asylum under my care, the medical certificates distinctly set forth that the patients laboured under an uncontrollable or insane craving for stimulants, and the sheriff granted warrants upon these certificates. In one case sent to the asylum by Dr. Christison and Dr. Douglas MacLagan, in 1854, the medical certificate was as follows:—"We consider his case to be very aggravated one of insane propensity to drinking; that he appears for a long time past to have been never sober, except under compulsion; and therefore we consider him to be insane, and a fit subject for confinement in a lunatic asylum, both for the safety of himself and others, and likewise for treatment."

Under the new Lunacy Act for Scotland, the medical certificates must now contain those facts observed by the medical men themselves, and those communicated to them by others, on which their opinion has been founded as to the insanity; yet no difficulty has as yet been experienced in obtaining warrants for the confinement of such patients in asylums. In England these forms of certificates have been in use for years, and I have never understood there was any difficulty in sending such cases to asylums there.

In the First Report of the English Commissioners in Lunacy, issued in 1844, the form of insanity under discussion is distinctly recognised and very graphically described.

The term "moral insanity," they say, "is used to designate a form of mental disease in which the affections, sentiments, habits, and, generally speaking, the moral feelings of the mind, rather than the intellectual faculties, are in an unsound and disordered state. The common distinctive character of all these cases is of a negative kind—viz., that the faculties of the understanding remain apparently unimpaired, and that no delusive impression can be detected in the mind of the patient, which may account for the perversion of his moral disposition, affections, and inclinations. Cases of this kind were formerly looked upon as unaccountable phenomena. They are, however, now recognised as a distinct form of mental disorder in nearly all the public asylums. They are characterized by a total want of self-control, with anordinate propensity to excesses of various kinds—among others, habitual intoxication. This is often followed by an attack of mania, which, however, speedily subsides when the patient is confined, but is generally reproduced by the same exciting cause when after he is discharged."—(*Report*, p. 108.)

In the Eighth Report of the Inspectors-General for Ireland, 1857, the disease is specially, and with even more distinctness, recognised and defined.

'As formerly," they say, "so within the last year, cases of *moral madness*, originating in drink and dissipation, have been

frequently admitted into private licensed houses. Some of them, discharged after a few months' confinement, were not since readmitted, whilst others have been brought back. These latter cases are most perplexing: even after the lapse of a few days, the salutary effects of control are visible in their regard; once free, however, they become the mere children of impulse, reckless of personal respect, regardless of the value of money, and scorning even decency itself. Rational in conversation, and most plausible in manner, within the asylum, their conduct is displayed out of doors in a series of the most irrational actions. It is painful to keep such parties confined, but still more so to let them run at large to certain destruction. As an illustration, we may adduce the case of a lady, at present in confinement in a private licensed house, who has been admitted and discharged four or five times within our knowledge, and who, when at liberty and mistress of her allowance, spends it in one continued orgie of drink and dissipation. We may here observe that a characteristic of this class is, at all times, *an utter disregard of truth*, together with an unceasing desire to impose upon the credulity of their hearers by the most specious pretensions to sense and wisdom, and the most solemn promises that a future morality would efface the errors of their past life."—(p. 24-5.)

With these statements before us, it cannot be doubted, on the authority of the highest judges in the country, that persons affected with the moral insanity I have described are proper objects for confinement in asylums. A consideration of the general moral perversion referred to by the Irish inspectors, of the mental imbecility apparent in so many cases, and of the hereditary tendency so commonly to be detected, will tend to confirm this view of the subject in the minds of any who may still hesitate to adopt it.

Dr. Peddie referred to the legal definitions of insanity, as laid down by Hume and other distinguished legal authorities, in order to show that this form of the disease did not come under the legal definition of insanity, and that medical men, by inference, might not be legally justified in certifying a dipsomaniac to be insane. The same argument would apply to all other forms of *moral insanity*; and if a medical man were liable to prosecution or penalties for certifying a dipsomaniac to be insane, he would be equally so for granting certificates of insanity in a case of homicidal or suicidal madness, or in one of nymphomania, or indeed in any case of partial insanity where there was no delusion.

But I conceive the legal definitions of insanity, as laid down in legal works, have nothing whatever to do with the distinctions recognised by physicians as rendering a person insane with a view to his treatment in an asylum. The legal definitions have a legal bearing only, and refer to the kinds of insanity recognised

our courts of law as exculpating from crime, or as nullifying wills or other civil acts. The certificates of insanity granted for the purpose of confining a patient in an asylum, and the warrant of the sheriff, do not make him legally insane in these respects; they neither disqualify him for civil acts, nor exempt him from criminal responsibility. A will executed by an inmate of an asylum might be held to be good, on proof of his not being affected with that kind or degree of insanity which incapacitated him in the eye of the law from disposing of his property; and a person committing a criminal act, an act of homicide, might not claim exculpation in a court of law on the mere plea of being in an asylum, unless the insanity were such as to prevent him from distinguishing right from wrong in the act which he committed.

In the same way, the appointment by the Court of Session of a *curator bonis* to a party, on the ground that he was insane and incapable of managing his own affairs, would not of itself be sufficient to make that person a proper object for confinement in an asylum, nor would it exculpate him from a charge of assault, or any other criminal act.

Let these opinions may be cavilled at as loose or conjectural, I think it right to add a few remarks in explanation, with one or two references to facts in support of them. I by no means assert that confinement in an asylum does not affect a person *at all* in relation to his civil rights or responsibilities. It affects him to this extent, that it affords an *a priori* presumption that he is insane, and therefore incapable—*e.g.*, of executing a valid will, or irresponsible for a crime. But that is only a presumption, which can be set aside by evidence. The burden of proving insanity, in such a case, is shifted to the opposite party. When a man, not in an asylum, executes a will or commits a crime, the presumption is that he is sane till the contrary is proved; and the parties wishing to set aside the will, or to exculpate from crime, must prove insanity. But, on the other hand, if a will were executed, or a crime committed, by a person in an asylum, the presumption would be that the person was insane, and that the will was invalid, or the person irresponsible, until the contrary was proved. And in this case the parties wishing to establish the validity of the will, or the responsibility for crime, would require to establish by proof that the person enjoyed a lucid interval at the time, or that he was sufficiently sane to be able to dispose of his property, or to distinguish right from wrong in the criminal act which he committed. That these are not mere theories could be established by numerous references. Many disputed wills have been declared to be valid, although made by persons who were undoubtedly and confessedly insane, to a certain extent, at the time at which they were executed; and many have been convicted of criminal offences, and punished for them, who were

insane at the time of their commission, but whose insanity was not, in the opinion of judge and jury, of such a nature or degree as to render them irresponsible for their acts. I shall cite only one or two cases in corroboration of these statements. In the case of *Cartwright v. Cartwright and Others*, the testatrix wrote her will with her own hands, *loosened from their ligatures for the purpose*; and, while writing it, she was observed frequently to leave off writing, throw torn pieces of paper into the fire, and walk about the room in a wild and disordered manner. Yet the will was held to be valid, because it bore no marks of agitation or insanity, and was consistent with her attachments and impressions when sane.* In another case (that of *Coglan*), the person made his will *while in an asylum*; but, on proof that at the time he made it he was as competent to converse on the subject of testamentary dispositions as before, and that he had before his insanity intimated his intention of leaving his property as he did in the will, it was held to be good.†

In regard to the responsibility for crimes, need I refer to the well-known case of *Bellingham*, who was convicted and executed for shooting the Hon. Spencer Perceval; to that of *Howison*, executed in Edinburgh in 1832, for murdering the woman *Geddes*; or to many others, in proof that partial insanity does not exculpate from the guilt of murder in every case? And surely it will not be questioned that *Bellingham* and *Howison* might have been justly detained in asylums, and indeed ought to have been in asylums, in order to prevent the acts which their insanity prompted them to commit. In the case of *Thomas Bowler*, an epileptic maniac, tried and executed for shooting at *William Burrows*,‡ a Commission of Lunacy finding the prisoner insane for some months previous to the commission of the act was actually produced in his defence, yet he was convicted. These facts, and many others of a similar kind which might be cited, leave no doubt, I think, that the legal definitions of insanity do not affect the question of committal or detention in an asylum for the purposes of treatment, but refer specially and only to the capacity of the person for civil acts, or to his responsibility for acts of a criminal nature.

I conceive that a man is insane, and legally so, for the purposes of confinement in an asylum, if two medical men certify on soul and conscience, and do not wilfully or falsely so certify, that he is insane, and a fit object for an asylum, and if the sheriff grants a warrant accordingly, whatever the definitions of insanity given by *Blackstone*, *Erskine*, *Hume*, or the twelve judges may be.

I may add, that petitions for liberation, on the ground of

* *Shelford "On the Laws concerning Lunatics," &c., p. 382.*

† *Ibid.* p. 387.

‡ *Ibid.* p. 590.

wrongous detention, have been uniformly, and in innumerable instances, forwarded by me, from parties labouring under this disease, to the sheriffs, to the Lord Advocate, and the Secretary of State; and in no instance have any of those authorities ordered the release of such patients, on the ground that they were improperly or illegally detained in the asylum. In one case, referred to by Dr. Peddie, that of a gentleman confined under the 4 and 5 Vic., c. 60, as a dangerous lunatic, whose case was confessedly one of moral insanity of the kind before us—one of insane drinking, there was an appeal made in due form to the High Court of Justiciary for liberation, yet the Court refused to interpose or reverse the order of the sheriff.*

It cannot, therefore, be doubted, on a review of such facts, that persons affected with this form of moral insanity may be legally and properly consigned to asylums, and detained there for treatment.

The principal ground, however, upon which it is contended that some new legislative enactment is required for the treatment of the cases of moral insanity under consideration is, that they *cannot be detained long enough in asylums*, under the present laws, for the purpose of effecting a cure of the disease. In regard to this point, I must confess that the difficulties I have had chiefly to contend with are such as could be obviated by no new act of legislation. Such patients, when removed too soon, have been so removed almost invariably by their own relatives, or on the advice of their own medical attendants. When they recover from the immediate effects of their habits of uncontrolled drinking, they appear so sane, they make so many plausible promises, and they are so full of self-reliance, that they generally succeed in persuading their friends that they ought to have a trial; or they try the art of intimidation—threaten to quarrel with their friends and cut them off without a shilling in their wills, unless they take them out, or threaten the medical attendants who consigned them to the asylum with actions of damages, unless they are immediately liberated, and so succeed in getting the one

* Since the preceding pages were written, an important case, bearing upon the subject, has been decided in the English courts, before Lord Campbell and a special jury. In this case (the Queen v. Armstrong), the lady had been found a lunatic under a commission; and the issue tried was whether she was justly found to be of unsound mind, and incapable of managing herself and her property. The violence was to the effect that, although not of strong mind, she had no delusions, but had a craving for stimulating drinks which she could not control, and she said she would have wine if she died for it. She would have it for all her father, the doctor, her husband, or God himself. When she was at large, she acted honourably in her monetary dealings, but drank to a great excess. Lord Campbell agreed in the law that intemperate or immoral habits alone would not be enough to constitute insanity; but, after reviewing the whole evidence, the jury found that she had been of unsound mind at the time of the inquisition, and was now "incompetent to manage her own affairs on account of her habitual drunkenness."—*Times*, 11th and 13th February.

party or the other to recommend their liberation, rather than encounter the threatened alternatives. I cannot recall to recollection a single instance in which any such case of moral insanity has been ordered out of confinement by the legal authorities contrary to my advice, and before I considered the patient was justly entitled to a trial. I am quite willing to admit that in many of the cases I have had under my care, the sheriff might have intimated his opinion that they ought to have a trial being set at large, had his interference not been forestalled by that of his friends; but I feel confident that if such cases, premature liberation, had relapsed and been sent back, the detention would not have been interfered with during a very considerable period of probation. And admitting, as I do, the necessity of a pretty long period of confinement, extending to one or two years, or even more, for the cure of confirmed chronic cases of this moral insanity, I cannot but admit at the same time the justice and propriety of giving patients of this class a trial, after their first confinement, at the end of three or six months, if they give anything like a reasonable hope of doing well, and if their powers of self-control have been tested with favourable results. It has been my practice, and I believe it has been that of the physicians of other chartered asylums, to test the powers of self-control of such patients, after they have been sufficiently weaned by abstinence from their morbid cravings—to permit them to go beyond the asylum on their parole, to visit their friends, to spend a day or two with their relatives, or to lodge for a week or two in the neighbourhood; and if they display, under those circumstances, the ability to control their appetites and regulate their conduct, then I consider myself bound to liberate them; while, on the other hand, if they break through the restraints imposed upon them by their own voluntary pledges, and are unable to keep their promises and pursue temperance, I consider myself entitled to prolong their period of confinement, and, in doing so, I have never yet been interfered with by the arm of the law.

The practice in other parts of the empire may be different from the views which some sheriffs, or the views which our newly appointed Commissioners in Lunacy may take of such cases, may be different; but I do think, as the real nature of this deplorable disease becomes more fully known, the administration of the existing laws must expand, so as to permit all that can be properly and wisely asked as to the duration of time required for the effectual treatment of such cases, with a view to their complete cure of a morbid, and incontrollable, and self-destroying appetite.

There is, however, another objection to the management of such cases in asylums,—and that is, the natural repugnance

the friends of patients, and by the patients themselves, to being associated with persons affected with other forms of insanity. It is considered very hard that persons who, in a few years after their isolation, recover apparently the use of their reason and all their other faculties, should be compelled to associate with raving maniacs, with the fatuous and demented, and with melancholy or violent companions.

To meet this difficulty, and the more serious one already discussed—viz., that such persons cannot generally be detained long enough in asylums to effect a radical cure of their disease, Dr. Bailey proposes that an effort should be made to obtain some legislative enactment for the management of such cases, and that suitable establishments should be provided for their treatment, and the powers to be granted by such an enactment. I am far from saying that this is not desirable; on the contrary, I believe it would be a great boon to society, and would remove most of the difficulties which must continue to be experienced, under the present law, in the treatment of moral insanity.

I fear, however, the prospect of any legislative Act on the subject is very distant and very problematical. The difficulty of coming to any agreement with it, the fear always dreaded of interfering with the personal liberty of the subject, the apprehension that the operation of any such Act might extend to mere drunkards, or might otherwise improperly be used, must operate, I fear, at least for many years, to prevent any attempts to legislate regarding this subject.

The object in this paper, therefore, has been to show that, under the existing laws, there are facilities for the isolation and treatment of undoubted cases of dipsomania, which may serve all practical purposes. It is impossible to foretell what the laws regarding the detention of such cases in asylums for a proper period of probation and treatment may be under the administration of the recently-appointed Commissioners in Lunacy for Scotland; judging from the tenor of the Report of the late Commission of Enquiry, and from the known character and ability of the new Commissioners, it is not to be anticipated that a narrowed or restricted view will be taken of the nature of such cases, or the necessity of prolonged confinement for their cure.

The English Commissioners, in their first Report, say—"It has been our practice, in cases of this sort, to liberate the patients after a short confinement, if it be the first attack of insanity from any cause, and if he appear to be aware of his misconduct, and to have a desire to reform his habits. In the event, however, of his being again confined a second time owing to the same cause, we have thought that his probation ought to continue for a much longer period; and indeed we have felt that great responsibility has rested

upon us in such a case, and have at all times very reluctantly—and only after vainly endeavouring to induce the patient's friends to take charge of him—resorted to our power of liberation.”—(p. 176.)

I have uniformly found the authorities in Scotland influenced by the same principles; and I have no doubt, as the true nature of this disease becomes more fully recognised, that these principles will continue to be acted upon, and made to reach the requirements of the proper medical treatment of the disease by sanctioning a sufficiently long isolation.

In regard to the second objection to asylum treatment, that can be met at any time, if these observations are correct, by establishing either a private or a public asylum specially devoted to the reception of such cases. The patients would be sent there, of course, under the same certificates and warrants as other cases of insanity; but the institution preserving its distinctive character as an hospital for such cases only, and having, if it were thought proper, a special designation, would not be liable to the objections urged against an asylum for the insane.

In fine, if the disease which we call moral insanity, or dipso-mania, is not really a form of insanity, it would be very dangerous to legislate on the subject; but if it is a form of insanity—and of this, I think, *we* have no doubt—the existing laws regarding the insane ought to meet the requirements for its treatment; and, by a liberal and enlightened administration of those laws, I do not doubt they will be found to do so, without the necessity for new legislation. If anything more is wanted, let some enterprising individual, or company, with a moderate capital, license a country-house surrounded with an agreeable landscape, and with grounds affording extended walks or drives, and the amusements of fishing and shooting; let the establishment command all the sources of recreation which a well-arranged asylum possesses; and let it be designated by some appropriate and agreeable name—not “*Asylum*,” nor “*Inebriate Asylum*,” like the American institution of the kind, which, I believe, did not succeed; let the patients of this class be sent to that sanatorium under a warrant of the sheriff as insane; and let them be treated according to the most approved principles of our art, under the direction of an enlightened physician, with an efficient staff of trustworthy attendants; and let patients be taken at different rates of board, suitable to their means,—and I doubt not most of the difficulties at present felt in dealing with this disease, if not all, will be successfully met, and that such an establishment would soon be distinguished for its usefulness, and prove a valuable source of revenue to its proprietors.



DR. E. BROWN-SÉQUARD
ON THE
PHYSIOLOGY AND PATHOLOGY OF THE
NERVOUS SYSTEM.

(With an Illustration of an Epileptic Guinea-pig.)

great interest which has been excited among the profession, in London, by Dr. E. Brown-Séquard's Lectures on the Physiology and Pathology of the Nervous System, recently delivered, first at St. Thomas's Hospital, and subsequently at the Royal College of Physicians, has only been commensurate with their importance.

Dr. E. Brown-Séquard has been known for several years as a distinguished and very successful experimental physiologist; but he has perhaps been so well known and appreciated in this country as he has been, from the fact that his researches have been published in somewhat disconnected fashion in sundry American, French, and English journals. Hence it has been difficult for many to obtain a full view of the whole of his writings, and it has never been easy to obtain the full extent of his researches upon any particular subject. His lectures which he has recently given in London have been reduced to a summary of his principal researches on the nervous system; and the majority of the experiments by which he seeks to establish his opinions he entertained were exhibited on the living animal during the course of the lectures.

Far from their subject, Dr. Brown-Séquard's lectures were of singular interest as a psychological study. Although born in a British colony, now an American citizen, Dr. Brown-Séquard is by maternity and by predilection and language wholly, a Frenchman. Speaking English somewhat imperfectly, it might be thought that he would be at some disadvantage before an English audience; but the force of his address and the precision of his descriptions quickly enabled the listener to lose sight of any imperfections which might arise from the want of a complete mastery of the English tongue. Indeed, the mind of the lecturer seemed to be almost the more actively and clearly set forth from the very shortcomings of the English in which it was shown.

His steady, unfaltering observation,—the careful precautions against error, either from the mind or from the senses,—the checks ever interposed during research, not as stumbling-blocks, but as marks from which to try-back (so to speak), and re-examine, and confirm the truthfulness of the course already run,—the unwearied perseverance, yet the quiet, soul-warming enthusiasm, which became apparent

during the course of the lectures, formed a rare and most instructive study and lesson.

The true character of Dr. Brown-Séquard's researches on the nervous system can only be fully appreciated by a reference to the original memoirs in which they were made known. Many of these memoirs cannot, however, be readily obtained; but the projected publication of the lectures delivered at the Royal College of Surgeons will probably soon place a detailed and connected account of these researches within the reach of most persons.

In this article we propose to give a brief summary of the principal results of Dr. Brown-Séquard's more interesting and important researches on the nervous system.

I. (a) It is generally believed by physiologists that the conductors of sensitive impressions in the spinal cord decussate either in the medulla oblongata alone, or in that ganglionic centre, the pons varolii, the corpora quadrigemina, and the crura cerebri,—these structures forming the so-called Isthmus of the Encephalon. Numerous experiments performed by Dr. Brown Séquard have shown that “*the impressions made on one side of the body are transmitted to the sensorium by the opposite side of the spinal cord*,” and that, consequently, the sensitive fibres coming from the trunk and the limbs do not decussate in the medulla oblongata, or the Isthmus of the Encephalon.

The following experiments seem to prove fully the crossed transmission of sensations in the spinal cord. (1) If a lateral half (*i.e.*, the posterior and the antero-lateral columns and the grey matter of one side of the spinal cord) is divided transversely at the level of the tenth costal vertebra, on a mammal, it is soon evident that the sensibility is much diminished in the posterior limb opposite to the side of the section. On the contrary, the sensibility, instead of being lost, appears much increased in the posterior limb on the side where the section has been made. (2) If, instead of one transversal section of the spinal cord, two, three, or many more are made on the same lateral half of that organ, the same results are obtained. (3) If, instead of mere sections, a removal of a part of a lateral half of the spinal cord is effected, the same results are still obtained. (4) If a longitudinal section is made on the part of the spinal cord giving nerves to the posterior extremity, so as to divide that part into two lateral halves, then it is found that sensibility is completely lost in the two posterior limbs, although voluntary movements take place in them. (5) If a similar separation of two lateral halves of the spinal cord is made on the whole part supplying nerves to the anterior limbs, then it is found that sensibility is lost in both these limbs, and that it is only slightly diminished in the posterior limbs. (6) If the same operation is done

in the preceding experiment, and afterwards if a transversal division made on one of the lateral halves, in the place where it is separated on the other, then it is found that the posterior limb on the side of the transversal section remains sensible, and that the other posterior limb loses its sensibility.

By these experiments the crossing of the sensitive nervous fibres in the cord is very clearly shown. The last three experiments demonstrate directly the crossing; and the transversal sections of a lateral half of the cord prove that sensibility is much diminished in the side of the body opposite to that of the section, consequently they prove also that there is a crossing of a great part of the sensitive fibres.

Numerous cases of injury or disease of a lateral half of the spinal cord in man are on record, in which, while palsy existed on the side of the injury, there was also a greater or less degree of hyperæsthesia on the same side, and anæsthesia existed on the opposite side. These cases, which were previously regarded as being anomalous and inexplicable, are now fully explained by Dr. Brown-Séquard's researches, and they form most weighty evidence in favour of his conclusions.

Further, Dr. Brown-Séquard argues that—

"If the crossing of the sensitive-nerve fibres does not take place in the spinal cord, it must take place somewhere in the medulla oblongata and pons varolii. If it takes place in the medulla oblongata and the pons, what must be found in cases where an alteration exists only in one side of these nervous centres? There must evidently be a diminution of sensibility on both sides of the body, because many fibres belonging to the two sides must necessarily be crossed or divided. Let us suppose, for instance, a tumour, as large as a walnut, having altered or destroyed one of the sides of the pons varolii (there are many such cases on record); and let us admit that it is the left side. Now, on this side there are the sensitive fibres of the left side of the body, which we have not yet made their decussation, and which make it in the pons, or a little waywards, between the corpora quadrigemina or crura cerebri. These fibres are crossed or divided, and, in consequence, the left side of the body must lose a part of its sensibility. But the fibres coming from the right side of the body, and which have made their crossing in the medulla oblongata, and also the fibres from the right side which pass in the pons from the right to the left, must be altered or divided, and, in consequence, the right side of the body must lose a part of its sensibility; so that the two sides of the body, in this hypothesis, must have a diminution of sensibility. A like reasoning might be applied to what must take place when the disease exists in one side of the medulla oblongata, admitting that the decussation of sensitive fibres takes place mostly there; and the same thing might be said also for the parts anterior to the pons varolii, if it were admitted that there takes place the greatest part of the decussation of the sensitive-nerve fibres. Let us now see, then, what are the facts. In almost all the cases where a disease has existed on one side of the medulla oblongata, the pons, &c., there has been a loss or a diminution of sensibility on the opposite side of the body, and no diminution of sensibility on the same side. In cases where there has been an alteration on both sides (in one of the above-named nervous centres), but greater in one than the other, sensibility was lost in the side of the body opposite to the side of

the nervous centre which was most altered, and only diminished on the side of the body opposite to the side less altered in the nervous centre."

The increase of sensibility which occurs when a transversal section of the spinal cord in an animal is made, in the posterior limb on the side of the section, is a very interesting phenomenon. Its early development is due, in part, to absorption of oxygen from the atmosphere by the exposed spinal cord; but the cause of the hyperæsthesia, as dependent upon the injury done to the spinal cord, is, according to Dr. Brown-Séquard, paralysis of the vascular nerves. The palsied blood-vessels dilate, more blood is admitted to them, nutrition becomes more active, and, as a consequence, the vital properties, both of nerves and muscles, are increased. The effects, indeed, upon the circulation and nutrition of the parts below and upon the same side as a transversal section of the cord, are similar in character to those observed after section of the sympathetic nerve in the neck. It is worthy of remark, that the hyperæsthetic condition of the paralysed parts continues so long as the animal lives, and the functions of the injured cord are not restored.*

(b) The posterior columns of the spinal cord do not perform that important part in the transmission of sensitive impressions to the encephalon which some physiologists teach. Sensation is not destroyed by division of the posterior columns, and their integrity does not prevent loss of sensation. On the other hand, so long as a small portion of the central grey matter of the cord remains intact, sensitive impressions are transmitted to the encephalon; but complete division of the central grey matter deprives all parts below the section of all (save a very obscure) sensibility. Again, any injury of the antero-lateral columns does not affect the transmission of sensitive impressions in the cord. Hence it follows (as was partly surmised by Dr. Todd) that the central grey matter of the cord is the principal conductor of sensitive impressions from the trunk and limbs to the encephalon.

After, however, complete division of the central grey matter of the cord, certain sensitive impressions are still transmitted, although very obscurely, to the brain from the parts below the section; and Dr. Brown-Séquard believes that the anterior columns contribute positively, though but very little, to the transmission of sensitive impressions. This property seems to be possessed by a thin layer forming the sur-

* "Experimental Researches applied to Physiology and Pathology." By E. Brown-Séquard. New York. 1853. c. xx. This work consists of a series of papers reprinted from the "Philadelphia Medical Examiner."—"Experimental and Clinical Researches on the Physiology and Pathology of the Spinal Cord, and some other parts of the Nervous Centres." 8vo. Richmond (U.S.). 1855.—"On the Spinal Cord as a Leader for Sensibility and Voluntary Movements."—*Proceedings of the Royal Society*, vol. viii. p. 591.

face of these columns in contact with the grey matter. The fibres of this layer are totally deprived of sensibility.*

According to Dr. Brown-Séquard, sensitive impressions are transmitted to the encephalon in the following manner:—

"At their arrival in the spinal marrow, the sensitive impressions pass by the posterior columns, the posterior grey horns, and probably by the lateral cords. In these different parts of the spinal cord the sensitive impressions mount or descend (it may be shown that they will pass either upwards or downwards in the posterior columns), and after a short tract towards the encephalon or in the opposite direction, they quit these parts to enter the grey central substance, in which, or by which, they are finally transmitted to the encephalon."†

(c) When the spinal cord is cut slowly across from behind forwards, a gradual augmentation of sensibility is observed in all the parts below the incision until a certain limit is attained (the centre of the cord), beyond which limit, as the incision is advanced, sensibility diminishes gradually until it is extinguished. The changes in degree of sensibility occur simultaneously in all the parts below the incision.

When the spinal cord is divided gradually from side to side, the changes in degree of sensibility which follow in the parts below the division also occur simultaneously, and in an equal degree, in all the parts affected.

From these experiments it follows that the conductive elements of sensitive impressions are not disposed in columns or layers, each of which is connected with a definite portion of the skin, the muscles, &c. (as has been supposed by some physiologists); for if this were the arrangement, on a gradual section of the cord, a notable diminution of sensibility would be observed in some parts of the skin, or in some groups of muscles, &c., below the section, other parts of the skin and other groups of muscles being unaffected.

It results from Dr. Brown-Séquard's experiments, that every portion of the recipient and conductive elements of any segment of the spinal cord, takes a part in the reception and conduction of sensitive impressions from every portion of the body with which it is connected. For example, the different conductive elements proceeding from the surface of the anterior and from the surface of the posterior parts of the body, as well as the conductive elements of the intermediate parts, are distributed in all the conductive parts of the spinal cord, before and behind. The conductive elements proceeding, also, from the external surface of the thigh or arm, and from the internal surface of these members, as

* The property of being sensitive and that of conveying sensitive impressions are distinct one from the other; nerve-fibres employed to convey sensitive impressions may be deprived of sensibility.

† "Comptes Rendus des Séances et Mémoires de la Société de Biologie," t. xii. 1854.—"Proceedings of the Royal Society," vol. viii. p. 591.

well as from the intermediate parts, are distributed in all the conductive portions of the spinal marrow, transversely, in the lateral half of the opposite site. On the other hand, if a very limited zone of skin be imagined—a zone represented, it may be supposed, by a thousand conductive elements in the spinal marrow—these one thousand elements are disseminated in a lateral half of this nervous centre in such a fashion that they are present everywhere—before, behind, in the middle, near or far from the borders of the zone by which the transmission of sensitive impressions is effected in this organ.

In short, the smallest portion of the conductive zone, in a lateral half of the spinal cord, contains the conductive elements of sensitive impressions proceeding from every point of the body on the opposite side, placed below this little portion of the cord. Again, the impressions proceeding from every portion of a lateral half of the body are transmitted to the encephalon by conductive elements distributed in every portion of the conductive zone of the lateral half of the spinal marrow on the opposite side.

These data explain how it happens that sensibility is so rarely lost in cases of softening or of other alterations of the spinal cord, because so long as a healthy portion of the conductive elements of the cord remains, sensitive impressions will be transmitted from the parts of the body which are situated below the lesion in the cord. These data also explain why, in cases of hyperæsthesia or of anæsthesia of different degrees, dependent upon lesions of the spinal cord, the increase or diminution of sensibility is found almost equally distributed everywhere in the parts which are situated below the seat of the lesion.

Anæsthesia or hyperæsthesia which is limited to a small portion of the extremities, or trunk, is dependent upon a lesion of the encephalon, or of a nerve, and not of the spinal cord.*

(d) In mammals, birds, and other animals, after a transverse section of a lateral half of the spinal cord, voluntary motion is not entirely lost in the parts situated on the same side below the sections. In these animals there can be little doubt that a few motor fibres decussate in the spinal cord. There is no evidence of the existence of such a decussation in man. In him the voluntary motor fibres decussate in the medulla oblongata. If the decussation took place in the pons varolii, as stated by Valentin, Longuet, and others, disease of the pons would cause symptoms different from those ordinarily observed in affections of that portion of the nervous centres. For example, if one-half of the pons varolii were diseased, and the decussation of voluntary motor fibres

* "Nouvelle Recherches sur la Physiologie de la Moëlle Épinrière," par Dr. E. Brown-Séquard.—"Journal de la Physiologie de l'Homme et des Animaux," publié sous la direction du Dr. E. Brown-Séquard, No. 1, p. 139.

ok place in that organ, both sides of the body would be partially paralysed. But such is not the case, for the paralysis which is occasioned by disease of one-half of the pons varolii is confined to one side of the body.

Dr. Brown-Séquard considers that the voluntary motor nerve-fibres are distributed in the spinal cord in the following manner:—

The anterior pyramids of the medulla oblongata contain most of the voluntary motor nerve-fibres. In the cervical region of the spinal cord, the voluntary motor nerve-fibres are mostly in the lateral columns and the anterior grey cornua. In the dorsal and lumbar regions of the spinal cord, these nerve-fibres are in the anterior columns and in the grey matter.

There can be no doubt that the whole of the voluntary motor nerves decussate in the medulla oblongata; but the whole of the fibres in the anterior columns of the cord do not decussate there, some passing without decussation towards the encephalon. These fibres, Dr. Brown-Séquard regards as being motor, but not voluntary motor, and he believes that fibres of this character exist plentifully in the encephalon. He derives his principal reason for this conclusion from a pathological fact that convulsion may be caused on one side of the body by the same encephalic lesion which has caused paralysis on the opposite side.*

(e) Dr. Brown-Séquard's views on the crossed transmission of sensitive impressions in the spinal cord throw great additional light upon paralytic affections. If it be assumed that the sensitive nerve-fibres in the trunk and limbs decussate in great part, if not wholly, in the spinal cord, and not in the isthmus of the encephalon; and if it be also assumed that the voluntary motor nerve-fibres decussate in the medulla oblongata,—then it would follow that, according to the seat of alteration in the cerebro-spinal axis producing a paralysis, three different kinds of paralysis may exist:—

"(1) The alteration being in any part of the encephalon except the inferior portion of the medulla oblongata, the paralysis of voluntary motion and sensibility will exist on the side of the body opposite to the side of the disease.

"(2) The alteration occupying an entire lateral half of the inferior portion of the medulla oblongata at the level of the decussation of the pyramids, the paralysis of voluntary movement exists on both sides of the body, but incomplete; and the paralysis of sensibility exists only on one side, and it is that opposite to the side of the disease.

"(3) The alteration occupying the entire thickness of a portion of a lateral half of the spinal cord, the parts of the body situated behind it, at the same time, are paralysed of voluntary movement, and the corresponding parts on the other side are paralysed of sensibility."†

* "Experimental and Clinical Researches on the Physiology and Pathology of the Spinal Cord."—"Proceedings of the Royal Society," vol. viii. p. 591.

† "Experimental and Clinical Researches on the Physiology and Pathology of the Spinal Cord."

(*f*) Paralysis of sensibility occasionally exists in different parts of both sides of the body, produced by an alteration in only one side of the spinal cord. Three different kinds of paralysis may be described as produced by an alteration in a lateral half of the cord, and all characterized by the existence of paralysis of movement on one side of the body, and a more or less extended paralysis of sensibility on the two sides of the body. (1) If an alteration able to produce paralysis exists in the whole thickness of a lateral half of the cord, in the entire extent of the part from which come all the nerves going to one of the upper limbs, there will be paralysis both of movement and sensibility in that limb, and paralysis of movement in the trunk and the inferior limbs on the same side of the body, and, besides, paralysis of sensibility in the opposite side of the body (limbs and trunk). (2) If an alteration able to produce paralysis exists in the whole thickness and length of a lateral half of the cord which gives off all the nerves going to one of the inferior limbs, there will be paralysis both of movement and of sensibility in that limb, and only paralysis of sensibility in the opposite limb. (3) If an alteration able to produce paralysis exists in the whole thickness and in the whole length of a lateral half of the cord, the symptoms will be a paralysis of movement in the side of the body corresponding to the side altered in the cord, and a paralysis of sensibility on the two sides of the body (neck, trunk, and the *four* limbs).*

(*g*) Local paralysis of sensibility consequent upon an injury of the back, and on the side of the injury, is probably due to undue stretching of the roots of the posterior spinal nerves.

II. The medulla oblongata is usually regarded as the nervous centre of the respiratory movements, and as being, of all portions of the nervous system, that which is most essential to life. It would seem probable, therefore, that the removal of such an organ, even in cold-blooded animals, would be followed by speedy death. Such is not, however, the result of the operation; and Dr. Brown-Séquard ascertained that batrachia would live, under favourable conditions, more than four months after the loss of the medulla oblongata. During all that time the animals operated on remained seemingly in good health.

The duration of life after ablation of the medulla oblongata differs in different species of animals; and it may be reckoned by *months* for batrachia, by *weeks* for some reptilia, by *days* for other reptilia and for fishes, by *hours* for hibernating mammals, and by *minutes* (three to forty-six) for birds and non-hibernating mammals.

* "Experimental and Clinical Researches on the Physiology and Pathology of the Spinal Cord."

In animals deprived of the medulla oblongata, death is principally caused by insufficiency of respiration.*

Flourens, from the results of certain experiments which he made, arrived at the conclusion that the little V-shaped collection of grey matter which is situated at the base of the calamus, in the fourth ventricle, is the prime centre of the respiratory mechanism; and also, that this seemingly insignificant spot is essential to the integrity of the nervous system, and of life itself. Hence he called this little collection of grey matter the "*nœud vital*." Dr. Brown-Séquard has made a series of experiments with direct reference to Flourens' opinions on the "*nœud vital*," and the following interesting results have been arrived at:—

(1) Death is not always an immediate result of ablation of the "*nœud vital*." (2) When death occurs suddenly after this ablation, it is due in part to the sudden stoppage of the movements of the heart. (3) Irritation of the parts in the vicinity of the "*nœud vital*," as well as ablation of that point, produces sometimes arrest or enfeeblement of the movements of the heart. (4) After section of the pneumogastric nerves, ablation of the "*nœud vital*" occasions a sudden stoppage of the movements of the heart. (5) It is not in consequence of the absence of the "*nœud vital*" that the respiratory movements become sometimes arrested after ablation of that little organ, but rather in consequence of an irritation of the medulla oblongata of the same kind as follows galvanization of the pneumogastric nerves. (6) Irritation of the parts adjacent to the "*nœud vital*" sometimes causes stoppage of the respiration, when the "*nœud vital*" is not injured. (7) Respiration and circulation may continue with vigour and regularity during a great number of days, after ablation of the "*nœud vital*," whence it results that the point is neither the centre of origin of a pretended vital force, nor the prime motive centre of the respiratory mechanism. (8) Voluntary movements and the functions of the senses persist often after ablation of the "*nœud vital*." (9) The "*nœud vital*" does not appear to be essential to life.

Dr. Brown-Séquard has concluded, from his experiments upon the medulla oblongata, that the nervous centre of the respiratory movements is not limited to the parts in which modern physiologists have almost unanimously fixed it.†

III. Dr. Cl. Bernard discovered the curious fact that, after section of the sympathetic nerve in the neck, the face and the ear—particularly the latter—on the same side as the section, became warmer and more

* "Experimental Researches applied to Physiology and Pathology," c. xvi.

† "Causes de Mort après l'Ablation du Nœud Vital." — Brown-Séquard's "Journal de la Physiologie," No. 2.

sensitive than on the other side. Dr. Brown-Séquard repeated Bernard's experiments, and added several particulars to those he had discovered. Moreover, Dr. Brown-Séquard ascertained that section of a lateral half of the spinal cord in the dorsal region produces phenomena are observed in the posterior limb on the corresponding side similar in character to those observed on the side of the first section of the cervical sympathetic.

The following is a summary of the results of these important experiments:—

Section of the Cervical Sympathetic: its effects on the corresponding side of the face. (Cl. Bernard and Brown-Séquard.)

1. Blood-vessels dilated (paralysed).
2. As a consequence, more blood.
3. Elevation of temperature.
4. Sensibility slightly increased.
5. Ditto, lasting longer there than on the other side, when the animal is chloroformized.
6. Sensibility lasting longer there than on the other side during agony.
7. Many muscles contracted.
8. Absorption more rapid.
9. Increase of sweat and other secretions.
10. Reflex movements last longer than elsewhere after death.
11. After poisoning by strychnia the first convulsions take place.
12. A galvanic current too weak to excite convulsions elsewhere may act there.
13. The motor nerves, after death, remain longer excitable there than on the other side.
14. The muscles, after death, remain longer contractile there than on the other side.
15. The contractility of blood-vessels is greater, and lasts longer.
16. The galvanic muscular current (as ascertained with the rheoscopic frog) is stronger, and lasts longer than on the other side.
17. Cadaveric rigidity appears later there than on the other side, and it lasts longer.
18. It is easier to regenerate there than on the other side the vital properties of nerves and muscles, by in-

Section of a lateral half of the Cord in the Dorsal Region: its effects on the posterior limb on the corresponding side. (Brown-Séquard.)

1. The same effect.
2. The same effect.
3. The same effect.
4. Very much increased.
5. Lasting longer than elsewhere during chloroformization.
6. Longer than anywhere else during agony.
7. A state of slight contraction of the muscles.
8. The same effect.
9. Increase of sweat.
10. The same effect.
11. The same effect.
12. The same effect.
13. The motor nerves, after death, remain *notably longer* excitable.
14. The muscles, after death, remain much longer contractile.
15. The same effect.
16. The same effect (more).
17. Cadaveric rigidity appears *notably later* there than elsewhere.
18. The same effect (more).

jections of red blood a short time after they have disappeared.

19. Putrefaction comes on later, and seems to progress more slowly there than on the other side.

19. The same effect (more marked).

The whole of these remarkable phenomena, according to Dr. Brown-Séquard, arise from paralysis of the vascular nerves, and consequent dilatation of the blood-vessels. An increased quantity of blood finds its way to, and is contained in, the dilated vessels, the temperature becomes greater, nutrition is more active, and, as a consequence, the vital properties of nerves, muscles, and blood-vessels are increased.

The side of the face opposite to that on which the sympathetic in the neck has been divided, and the posterior limb of the side on which the spinal cord is uninjured, in the experiments of which the foregoing are the results, received less blood than usual, the temperature was lessened, nutrition was less active, and the vital properties of both nerves and muscles were diminished.*

IV. The rotatory movements which occur after injuries to certain portions of the nervous centres have long interested physiologists. Turning or rolling, to the one side or the other, may be occasioned by an injury to any portion of the cerebro-spinal centres, except the cerebral hemispheres, the cerebellum, the corpora striata, the corpus callosum, the spinal marrow, and the olfactive and optic nerves. Rolling is ordinarily produced by injury of some parts, and turning by injury of others; but both kinds of movement may occur after injury of one part of the encephalon only. Dr. Brown-Séquard believes that the principal cause of these rotatory movements is the existence of a convulsive contraction in some of the muscles on one side of the body. This convulsive contraction is found in every case of circulatory and rotatory movement, and it is dependent upon the irritation produced in the injured portion of the encephalon.†

V. Of all Dr. Brown-Séquard's discoveries none has excited so much interest, none is more suggestive than that in which he has shown that certain injuries of the spinal cord, in different species of animals, are allowed, in a few weeks' time, by "epilepsy, or at least a disease resembling epilepsy." This result is occasioned by the following kinds of injury to the spinal cord: 1st. A complete transversal section of a lateral half of this organ. 2nd. A transversal section of its two posterior columns, of its posterior cornua of grey matter, and of a part of the lateral columns. 3rd. A transversal section of either the posterior columns or the lateral, or the anterior alone. 4th. A complete

* "Proceedings of the Royal Society," vol. viii. p. 594.

† "Experimental Researches applied to Physiology and Pathology," c. v.

transversal section of the whole organ. 5th. A simple puncture. Of all these injuries, the first, the second and the fourth seem to have more power to produce epilepsy than the others. The first particularly, *i.e.*, the section of a lateral half of the spinal cord, seems to produce constantly this disease in animals that live longer than three or four weeks after the operation. After a section of either the lateral, the anterior, or the posterior columns alone, epilepsy rarely appears; and it seems that in the cases where it has been produced, there has been a deeper incision than usual, and that part of the grey matter has been attained. In other experiments, few in number, section of the central grey matter (the white being hardly injured) has been followed by this convulsive disease. It has occasionally, but very rarely, occurred after a single puncture of the cord. It is particularly after injuries to the part of the spinal cord which extends from the seventh or eighth dorsal vertebra to the third lumbar, that epilepsy appears.

The affection usually begins during the third or fourth week after the injury. At first the fit consists only in a spasm of the muscles of the face and neck, either on one or the two sides, according to the transversal extent of the injury. After a few days the fit becomes more complete, and the convulsions extend to every portion of the body which is not paralysed. The parts convulsed vary greatly according to the seat of the injury.

The "convulsions may come on spontaneously or after certain excitations. The most interesting fact concerning these fits is that it is possible, and even very easy, to produce them by two modes of irritation. If we take two guinea-pigs, one not having been submitted to any injury of the spinal cord, and the other having had this organ injured, we find, in preventing them from breathing for two minutes, convulsions come on in both; but if they are allowed to breathe again, the first one recovers almost at once, while the second continues to have violent convulsions for two or three minutes, and sometimes more. There is another mode of giving fits to the animals which have had an injury to the spinal cord. Pinching of the skin in certain parts of the face and neck is always followed by a fit. If the injury to the spinal cord consists only in a transversal section of a lateral half, the side of the face and neck which, when irritated, may produce the fit, is on the side of the injury; *i.e.*, if the lesion is on the right side of the cord, it is the right side of the face and neck which are able to cause convulsions, and *vice versa*. If the two sides of the cord have been injured, the two sides of the face and neck have the faculty of producing fits, when they are irritated. In other portions of the body but a portion of the face and neck has this faculty." The por-

sion of the face and neck having this power is contained within a zone limited by the four following lines: one uniting the ear to the eye; a second from the eye to the middle of the length of the inferior maxillary bone; a third, which unites the inferior extremity of the second line to the angle of the inferior jaw; and a fourth, which forms half a circle and goes from this angle to the ear, and the convexity of which approaches the shoulder. The property which the portion of skin included within the lines here described, possesses of occasioning fits on being irritated cannot be ascribed to excessive sensibility, because, when the injury exists only in one of the lateral halves of the cord, the face and neck on the other side have not the power of producing fits, whatever is the degree of irritation upon them; in the same case, the posterior limbs on the side where the cord is injured, is in a state of hyperæsthesia, and nevertheless, the most violent irritations upon this limb do not produce fits; and it is sometimes sufficient to touch the face or the neck, or even to blow upon them, to produce the fits.

Dr. Brown-Séquard thinks that these fits ought to be considered as epileptic.

"The following description," he writes, "of these convulsions will show that, if they are not positively epileptic, they are at least epileptiform. When the attack begins, the head is drawn first, and sometimes violently towards the shoulder by the contraction of the muscles of the neck, on the side of the irritation; the mouth is drawn open by the contraction of the muscles of the neck which are inserted upon the lower jaw; and the muscles of the face and eye (particularly the orbicularis) contract violently. All these contractions usually occur simultaneously. Frequently at the same time, or very nearly so, the animal suddenly cries with a peculiar hoarse voice, as if the passage of air was not free through the vocal chords, spasmodically contracted. Then the animal falls, sometimes on the irritated side, sometimes on the other, and then all the muscles of the trunk and limbs that are not paralysed become the seat of convulsions, alternately clonic and tonic. The head is alternately drawn upon one or the other side. All the muscles of the neck, eyes, and tongue contract alternately. In the limbs, when the convulsions are clonic, there are alternative contractions in the flexor and extensor muscles. Respiration takes place irregularly, on account of the convulsions of the respiratory muscles. Almost always there is an expulsion of fæcal matters, and often of urine. Sometimes there is an erection of the penis, and even ejaculation of semen."

These fits differ in certain particulars from epilepsy in man. The animals occasionally appear to retain their sensibility during the fits; no foam is found at the mouth; and the fits most commonly consist of a series of convulsive attacks, in the intervals of which the animals can rise and stand upon their feet. But these differences, Dr. Brown-Séquard thinks, ought not to prevent our considering the fits as true epileptic fits. "Not only the convulsions resemble those of true epilepsy, but the fits are not mere accidents; and they come by series

of two or three, once a-week, once a-day, or even ten or twenty times a-day, and the disease lasts for years. Besides, we find, after long and violent fits, that these animals are, for a time, in a state of drowsiness, like men after epileptic convulsions. It seems rational to conclude, from this discussion, that if the convulsions of these animals are not truly epileptic, they are at least epileptiform."

We have recently had frequent opportunities of witnessing these epileptiform seizures in a guinea-pig, a lateral half of the spinal cord of which, in the lower part of the dorsal region, had been completely divided, transversely, by Dr. Brown-Séquard, about four months ago. The wound in the vertebral column is healed up, fresh osseous matter having been deposited, and voluntary motion has been partially regained in the leg which has been paralysed by the section of the cord. The paralysed leg is highly hyperæsthetic, while in the opposite limb complete anæsthesia exists (an interesting illustration of the crossing of the sensitive nerve-fibres in the spinal cord). Slight irritation upon the skin of the face and neck within the small space* described by Dr. Brown-Séquard, immediately excites a convulsive attack. No better description of the fit can be given than that which has been given by Dr. Brown-Séquard, and which we have already quoted. The great interest of the phenomena connected with these convulsive attacks, has led us to conceive that a sketch of this pig, in a state of repose, and also a sketch of the animal in one of the most ordinary phases of a convulsive seizure, might prove interesting to those of our readers who have not had an opportunity of witnessing Dr. Brown-Séquard's experiments. In the accompanying plate (*see Frontispiece*) the first figure represents the guinea-pig in a quiescent state, the paralysed right-hand leg being protruded in a half-helpless fashion behind the animal: in the second figure the animal is portrayed in a moment of violent convulsion, which had been excited by pinching the skin above the angle of the right inferior jaw.

From his experiments on animals, and from pathological facts observed in man, Dr. Brown-Séquard has concluded that—(1) There cannot be any doubt that in animals certain injuries to the spinal cord frequently produce an epileptiform affection, if not true epilepsy. (2) That in man there are a great many cases which seem to prove that alterations of the spinal cord may cause epilepsy.

The *aura epileptica* in man would seem to be somewhat analogous to the sensory condition originating in the skin and face of animals made epileptic by injury of the spinal cord. "In them, as well as in

* This portion of the skin in all epileptic guinea-pigs is much infested with lice, some modification either of the surface or its secretion seemingly attracting these parasites to this point.

man (when there is a real aura), the trunks of the nerves seem not to possess the faculty of producing fits, whereas their ramifications in the skin, or in the muscles, have this power. In (epileptic) animals as well as in man, if there is an interruption of nervous transmission between the skin and the nervous centres, fits are no more seen, or at least their number is very much diminished. Many cases of epilepsy with an evident aura epileptica, are on record, in which there has been either a diminution of the fits, or more frequently a complete cure, after the interruption of nervous transmission between the starting point of the aura and the nervous centres. In these cases, the following various means have been employed with complete or partial success, either against the aura epileptica or against its production: 1st, ligature of a limb or a finger; 2nd, sections of one or more nerves, and amputation of a limb, or of other parts of the body; 3rd, elongation of muscles which are the seat of the aura; 4th, cauterization, by various means, of the part of the skin from which the aura originates."

From what occurs in animals after an injury to the spinal cord, and from some cases observed in man, it is not improbable that the existence of a particular spot capable of producing fits, when irritated, is not uncommon in epileptic patients. The existence of this spot may not be known to the patient, and it may be found only after a careful search.

In epileptic animals the brain is not essential to epileptiform convulsions. After it has been taken away the fit may be produced almost as easily as before the operation, by pinching the skin of the face and neck. Epilepsy in these animals has its seat in either the pons varolii, the medulla oblongata, or the spinal cord, or in these three parts together.

Dr. Brown-Séquard believes that epilepsy depends in great measure on an increased reflex excitability of certain parts of the cerebro-spinal axis. Many of his experiments, he thinks, "have shown that the reflex faculty of the cerebro-spinal axis is composed, as the muscular contractility is, of two elementary vital properties, one of which he calls the *reflex excitability*, and the other the *reflex force*. The cerebro-spinal axis may have a great reflex force, and very little excitability. It may, on the contrary, have an excessive reflex excitability with very little reflex force. In almost all epileptics, if not in all, the reflex excitability is increased, while the reflex force is rarely above, and often below, its normal degree."

The sudden cessation of the functions of the brain in epilepsy, may be explained by supposing that the branches of the sympathetic going to the blood-vessels of the brain proper, suffer from some irritation. As a consequence of this irritation, contraction occurs in these blood-

vessels, particularly in the small arteries. This contraction expelling the blood, the brain proper loses at once its functions, just as it does in complete syncope. The continuation of insensibility after the cessation of convulsions is due to, and in proportion to, the deficient oxygenation of the blood supplied to the brain proper.

From a careful consideration of the phenomena observed in epileptic animals and in the epilepsy of man, Dr. Brown-Séquard lays down the following propositions (among others) for the treatment of the disease: (1) The first thing to be done in a case of epilepsy is to find out if its origin is peripheric. The state of all the organs must be inquired into as completely as possible. (2) If it be ascertained that epilepsy is of peripheric origin, proper means must be employed to separate the nervous centres from that origin, or to remove the cause of the excitation entirely. Leaving aside what relates to the viscera, the application of ligatures ought to be tried first. (3) If ligatures fail, this is no reason for despairing of other means having the same object. The nerve animating either the part of the skin from which the aura originates, or the muscle or muscles which are first convulsed, must be laid bare, and sulphuric ether thrown upon it. This might, perhaps, be sufficient to cure the affection; if it is not, then the nerve must be divided. (4) Sometimes blisters, setons, caustics, &c., in the neighbourhood of a part which is the origin of an aura, may be sufficient to cure, but these means have not the same efficacy as the application of a red-hot iron. (5) The best means of treating epilepsy seem to consist in the application of a series of moxas along the spine, and particularly the nape of the neck. (6) The nutrition of the nervous centres may be modified, and thereby epilepsy cured, principally by the medicines which act on the blood-vessels, such as strychnia, but particularly by those which determine contractions in these vessels, such as atropia, ergot of rye, &c. (7) Hygienic means are as important as the treatment, and sleeplessness ought to be as much combatted as the disease itself.*

In the preceding article we have endeavoured to give in a small compass a correct notion of the character and results of Dr. Brown-Séquard's more interesting and important researches on the Nervous System; and in order to do this more completely, we have avoided any critical examination of his conclusions and opinions.

* "Researches on Epilepsy." (Republished from the "Boston Medical and Surgical Journal.") Boston (U.S.). 1857.

THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

JULY 1, 1858.

ART. I.—ON THE CAUSES OF IDIOCY.

BY S. G. HOWE, M.D.,
Of Massachusetts, U. S. A.

From a Report of the Commissioners appointed by the Legislature of Massachusetts, in 1846, to
inquire into the Condition of the Idiots of the Commonwealth.

ALL those who have a living and abiding faith and trust in the goodness and wisdom of the Creator, will readily believe that the terrible evils which now infest society are not necessarily perpetual; that they are not inherent in the very constitution of man, but are the chastisements sent by a loving Father to bring back his children to obedience to his beneficent laws. These laws have been as much shrouded in darkness, in times past, as the hieroglyphics of Egypt; and though they were written upon every man's body, no Champollion was found to decipher them. But a better day has dawned, and men are beginning to read the handwriting upon the world, which tells them that every sin against a natural law must be atoned for by suffering *here* as well as hereafter.

It is beginning to be seen, also, that man has a double nature and double interests; that he is a social being, as well as an individual; and that he cannot sin with impunity against the one nature any more than he can against the other. God has joined men together, and they cannot put themselves asunder. The ignorance, the depravity, the sufferings of one man, or of one class of men, must affect other men, and other classes of men, in spite of all the barriers of pride and selfishness which they may erect around themselves. The doctrine of impenetrability does not obtain in morals, however it may do in physics; but, on the contrary, as gases afford mutually a vacuum to each other into which they rush, so the nature of every individual is a vacuum to the nature of society, and its influences, be they for good or be they for evil, interpenetrate him in spite of himself. It is clear,

trying to hold off at arm's length—to keep in quarantine, up in gaols and almshouses, or, at least, to treat as a parish but all in vain.

There are the paupers—a host in themselves; the drunkards, the vagabonds, the criminals, the insane, the blind, the deaf—these together form a number, the proportion of which to the whole population is fearfully great, and the existence of which is a reproach to our civilization, for that existence implies ignorance and open violation of the laws of nature.

The moral to be drawn from the existence of the idiot is this:—he, or his parents, have so far violated the laws, so far marred the beautiful organism of the body, is an unfit instrument for the manifestation of the powers of the soul. The moral to be drawn from the prevalent existence of idiocy in society is, that a very large class of persons ignorant of the conditions upon which alone health and reason are given to man, and consequently they sin in various ways; they disregard the conditions which should be observed in intermarriage; they look to the hereditary transmission of certain morbid tendencies; they pervert the natural appetites of the body into lusts of the flesh; they turn the natural emotions of the mind into fearful passions—and thus bring down the awful consequences of their own sin and sin upon the heads of their unoffending children.

Idiocy is found in all civilized countries, but it is not necessarily inherent in society; it is not an accident; and unless it is a special dispensation of Providence; to suppose it to be so, is an insult to the Majesty of Heaven. No! it is merely the result of a violation of natural laws, which are clear and beautiful, which require only to be seen and

no information was obtained respecting the condition of the progenitors of 359. Now, in all these 359 cases, *save only four*, is found that one or the other, or both, of the immediate promoters of the unfortunate sufferers had, in some way, widely departed from the normal condition of health, and violated the moral laws. That is to say, one or the other, or both of them, are very unhealthy or scrofulous; or they were hereditarily predisposed to affections of the brain, causing occasional insanity; or they had intermarried with blood relatives; or they had been temperate; or had been guilty of sensual excesses which impaired their constitutions.

Now, it is reasonable to suppose that, if more accurate information could have been obtained about the history of the other four cases, some adequate cause would have been found in them also, for the misfortune of the child, in the condition of the progenitors.

This subject of the hereditary transmission of diseased tendency is of vast importance; but it is a difficult one to treat, because a squeamish delicacy makes people avoid it; but if ever the race is to be relieved of a tithe of the bodily ills which flesh is now heir to, it must be by a clear understanding of, and a willing obedience to, the law which makes the parents the blessing or the curse of the children; the givers of strength, and vigour, and beauty, or the dispensers of debility, and disease, and deformity. It is by the lever of enlightened parental love, more than by any other power, that mankind is to be raised to the highest attainable point of bodily perfection.

Can there be so sad a sight on earth as that of a parent looking upon a son deformed, or halt, or blind, or deaf, with the consciousness that he himself is the author of the infirmity; or upon a sick and suffering daughter, fading and dying in early youth, from the gnawing of a worm which he himself placed within her breast; or a wayward and unmanageable child, urged and hurried on to lust, and licentiousness, and crime, by the irresistible force of passions which he himself bestowed upon it? If such parent erred in ignorance; if he had always obeyed the laws of life and morality, as far as he knew them, still must his suffering be grievous; but if he sinned against the clear light of God's law; if he secretly defiled the temple of his soul, ran riot in lust, fed the fire of passion until it burnt out the very core of his body, and then planted a spark from the smouldering ashes to boot up into unhallowed flames in the bosom of his child—how horrible must be his sensations when he looks upon that child, consuming, morally, every day before his eyes! Talk about the dread of a material hell in the far-off future! The fear of that can be nothing to the fear of plunging one's own child in the

hell of passion *here*. It is probable that there are thousands of such parents among us, who never dream that they are at all responsible for those bodily ailments of their offspring which sadden their own lives; or for the stupidity, the waywardness or the vice which almost hardens their hearts against the children who manifest them, while, in reality, those ailments and vices are but the dregs of a poisoned chalice returned to their own lips.

It may be assumed as certain, that in all cases where children are born deformed, or blind, or deaf, or idiotic, or so imperfect and feebly organized that they cannot come to maturity under ordinary circumstances, or have the seeds of early decay, or have original impetuosity of passions that amount to moral insanity—in all such cases the fault lies with the progenitors. Whether they sinned in ignorance or in wilfulness, matters not as to the effect of the sin upon the offspring. The laws of God are so clear that he who *will* read may do so. If a man violates them ignorantly, he suffers the simple penalty; if he violates them knowingly, he has remorse added to his suffering; but in no case on the penalty be remitted to him.

The conditions of the law of transmission of hereditary tendencies to disease of body and of mind are beginning to be known, but there are many circumstances which obstruct the spread of knowledge upon the subject. First and foremost among these is the mournful ignorance about Physiology. People are blind to principles which, if understood, would make the whole law clear and beautiful.

The transmission of any infirmity is not always direct. It is not always in the same form. It may be modified by the influence of one sound parent; it may skip a generation; it may affect one child more, and another less; it may affect one in one form, and another in another; and so, in a thousand ways, it may elude observation. But more especially does it escape observation, because it may affect a child merely by *diminishing*, not destroying, the vigour of his mind or body,—by almost paralysing one mental faculty, or giving fearful activity to one animal passion, and so reappearing in the child in a different dress from what it wore in the parent. Variety is the great law of nature, and it holds good in the transmission of diseased tendencies, as well as in everything else. But unerring certainty, too, is alike a characteristic of this law; and let no one flatter himself or herself that its penalties can be escaped.

The health and vigour of the body may be compared to a man's capital; it is a trust fund given to him by the Creator, on which he may expend the interest in the natural enjoyments of life, but he cannot encroach in the least on the principal without

al loss. Every debauch, every excess, every undue indulgence, at the expense of this capital. A rich man may throw away hundreds of dollars, and not feel it,—but he is really poorer for it; and a young man, with a large capital of health, may daily throw away part of it, and still feel strong; but every over-stimulant to the nerves, every overload to the stomach, is a cent or a dollar taken from his capital; feel it, or not feel it, he is poorer for it, and so will be the children afterwards born to him.

There is this difference, however, between the capital which God gives man, and that which he accumulates for himself,—that the one is never so great but its interest can be spent with enjoyment, while the other may be so enormous as to cumber and embarrass him like an overload of fat. He may grasp so much, that, like the boy with his fist full of olives in the narrow-mouthed jar, he cannot withdraw it, and will not let any drop.

Were it not for the action of certain principles which give to the race recuperative powers, there would be danger of its utter deterioration as a whole by the sins of so many of its individual members.

The conviction of the existence and the importance of the law of hereditary influences has been brought home so strongly by examining the condition of the unfortunate objects of this research, that this digression has been inevitable.

Before referring to the tabular views appended, we shall attempt to give an idea of the leading differences among the persons referred to, although it is no part of the object of this Report to establish a scientific classification of idiots. The best way, perhaps, to give an idea of the leading distinctive features of different classes of these unfortunate beings will be to describe several individual cases. For all humane and practical purposes, we may divide them into PURE IDIOTS, FOOLS, and SIMPLETONS, or IMBECILES, as they are sometimes called.

According to M. Séguin, the type of an idiot is an individual who "*knows nothing, can do nothing, cannot even desire to do anything.*" This is the maximum of idiocy; the minimum of intelligence; and but very few cases can be found (we were inclined to think none could) in which a being in human shape is much below even insects, and so little above a sensitive plant. In the vast European hospitals, in which the two ends of humanity seem to meet—where beneficence, guided by science, stoops to give attention to the most shocking and repulsive forms of human suffering and degradation;—those great lazaret-houses of London and Paris do sometimes, as their records show, present such cases of idiocy as, one would fain hope, can be found nowhere else. But, alas! when, overcoming the repugnance to

close contemplation of utter degradation, one looks carefully among the *sweepings* that are cast out by society for something that may be saved to humanity, he finds, even in our fair commonwealth, breathing masses of flesh, fashioned in the shape of men, but shorn of all other human attributes.

IDIOTS OF THE LOWEST CLASS ARE MERE ORGANISMS, MASSES OF FLESH AND BONE IN HUMAN SHAPE, IN WHICH THE BRAIN AND NERVOUS SYSTEM HAS NO COMMAND OVER THE SYSTEM OF VOLUNTARY MUSCLES; AND WHICH CONSEQUENTLY ARE WITHOUT POWER OF LOCOMOTION, WITHOUT SPEECH, WITHOUT ANY MANIFESTATION OF INTELLECTUAL OR AFFECTIVE FACULTIES.

FOOLS ARE A HIGHER CLASS OF IDIOTS, IN WHOM THE BRAIN AND NERVOUS SYSTEM ARE SO FAR DEVELOPED AS TO GIVE PARTIAL COMMAND OF THE VOLUNTARY MUSCLES; WHO HAVE CONSEQUENTLY CONSIDERABLE POWER OF LOCOMOTION AND ANIMAL ACTION; PARTIAL DEVELOPMENT OF THE AFFECTIVE AND INTELLECTUAL FACULTIES, BUT ONLY THE FAINTEST GLIMMER OF REASON, AND VERY IMPERFECT SPEECH.

SIMPLETONS ARE THE HIGHEST CLASS OF IDIOTS, IN WHOM THE HARMONY BETWEEN THE NERVOUS AND MUSCULAR SYSTEM IS NEARLY PERFECT; WHO CONSEQUENTLY HAVE NORMAL POWERS OF LOCOMOTION AND ANIMAL ACTION; CONSIDERABLE ACTIVITY OF THE PERCEPTIVE AND AFFECTIVE FACULTIES; AND REASON ENOUGH FOR THEIR SIMPLE INDIVIDUAL GUIDANCE, BUT NOT ENOUGH FOR THEIR SOCIAL RELATIONS.

Among idiots proper should be classed the following cases:—

E. G., aged eight years. This poor creature may be taken as a type of the lowest kind of idiocy. He has bones, flesh and muscles, body and limbs, skin, hair, &c. He is, in form and outline, like a human being, but in nothing else. Understanding he has none; and his only *sense* is that which leads him to contract the muscles of his throat, and swallow food when it is put into his mouth. He cannot chew his victuals; he cannot stand erect; he cannot even roll over when laid upon a rug; he cannot direct his hands enough to brush off the flies from his face; he has no language—none whatever; he cannot even make known his hunger, except by uneasy motions of his body. His habits of body are those of an infant just born. He makes a noise like that of a very sick and feeble baby,—not crying, however, in a natural way. His head is not flattened and deformed, as is usual with idiots, but is of good size and proportion.

It would seem as if the powers of *innervation* were totally wanting in him. There is no nervous energy; nothing to brace the muscles; no more power of *contractility* than in a person who is dead drunk. The involuntary muscular motions are properly performed; that is, the organic life goes on regularly; the heart

contracts and dilates; the peristaltic motion of the bowels is regular.

The probable causes are hereditary ones. The grand-parents were very scrofulous and unhealthy. The parents were apparently healthy, but gave themselves up to excessive sensual indulgence. They lost their health in consequence of this, and were so well aware of it as to abstain and to recover again. In the mean time, five children were born to them, two of whom were like E. G., and died at five or six years of age: two others were very feeble and puny, and died young.

A male, aged nine years. This organism in the human form is hardly a grade higher than the preceding. He has no muscular contractility; he cannot stand, nor sit upright, nor even turn over; for, if laid upon his stomach, he paws and kicks until turned over upon his back, which position he likes best. He has not even power to masticate his food, though he swallows very well when it is thrust into his mouth. He has no language, but seems to understand some simple sentences. He has more intelligence than the boy above-named, and the principal trouble seems to be want of contractility. He can feel flies that alight upon his skin, and can brush them off. His habits are like those of an infant. His head is very small.

The causes are probably hereditary, and he seems to be the last and lowest of a constantly degenerating breed. The grand-parents were intemperate and depraved. The children born unto them were puny and weak-minded, and they sank still lower in the slough of vice and depravity. The mother of this boy was herself a simpleton; and this was her second illegitimate child. Though of feeble health, she gave herself up to excessive licentiousness, her passions becoming almost maniacal.

H. W., aged seventeen. This wretched being seems to be, like the preceding ones, so deficient in nervous energy that he lies almost as powerless as though he were a mass of jelly, without a bone or a muscle in his composition. If his legs are pinched or irritated, he seems to try to move them, but scarcely draws them up an inch. If flies alight upon his face, he can hardly reach them with his hand. He sometimes rolls his head from side to side with a languid motion, and this is the most he can do in that way, for he cannot raise it up even to take food. He is fed like a sick infant, with half-chewed victuals, from a spoon. He has no speech, and apparently no knowledge of persons. When food is brought near to him, something like a smile comes over his countenance; perhaps he is made aware of it by the smell.

His head is not very small, nor is it deformed. The family of which he comes is very scrofulous and degenerate physically.

His relatives (especially his mother) are, many of them, remarkable for erysipelatous humours, tumours, carbuncles, &c. One of his cousins is idiotic, though not of so low a degree as he is.

It is remarkable, that in this case, as well as the two preceding, there is not the peculiar *look* so common with idiots, and which may be better expressed by the word *monkeyish* than any other. When the animal nature is pretty active, and there is, at the same time, a governing intellect, the resulting expression is human. The higher the intellectual endowment, the more lofty and noble is the look; the lower the degree of endowment, the more nearly the look approaches that of animals, until we get down to the mere twinkle of cunning in the low rogue, or the monkeyish looks of the idiot.

Now, the three persons above mentioned do not seem to be idiotic from any deficiency in the size, or deformity in the shape or structure, of that part of the organization on which the manifestation of intelligence immediately depends. There is, at any rate, no appearance of anything of that kind; but there seems to be a want of *power* in that part of the organization by which the nervous fluid gives energetic action to the frame. The look is that of languor rather than that of idiocy.

Among idiots of the lowest class are found some who, unlike the preceding, seem to have a superabundance of *innervation*, who have great *muscular contractility*—that is, great command of all the muscles by the nervous system—and who are consequently very active. They appear like insane persons in a state of excitement, and yet they have no speech, and no reasoning faculties. The distinction made with so much ingenuity by a celebrated French writer holds true here—“*The insane man reasons falsely; the idiot reasons not at all.*”

Jonas —, aged eight years. His body is well-proportioned and strong, but very small. His face has the deformed look of idiocy. The sides of his head seem to be at a fever heat. He is almost all the time in violent motion. His appetite is not only voracious, but evidently morbid and insatiable; for, after eating heartily at table, he swallows anything he can lay his hands upon—raw potatoes, the bark of trees, chips of wood, and even small stones. He has been known to swallow pebbles as large as chestnuts. He hears and seems to understand the meaning of some sounds, but has no speech. He has no sense of propriety, no affection, no attachment; his brothers and sisters are no more to him than the dog and cat.

His father was intemperate to the last degree. His mother was of a very scrofulous habit of body.

Cases of this kind are not very frequent, and they are often mistaken for cases of insanity. They are generally proper sub-

jects for instruction, though the long continuance of their life is not probable, for there seems to be morbid action in the brain.

FOOLS

MAKE THAT CLASS OF IDIOTS WHO HAVE THE MUSCULAR AND NERVOUS SYSTEM WELL DEVELOPED; POWERS OF LOCOMOTION AND ANIMAL ACTION; IMPERFECT SPEECH; PARTIAL DEVELOPMENT OF THE PERCEPTIVE AND AFFECTIVE FACULTIES, BUT VERY FEEBLE POWERS OF REASON.

This class is more numerous than the preceding. Cases are found in every town, in almost every almshouse. The type of this class would be a man who uses all his senses; who observes things about him; who can make simple sentences, and understand simple directions; but who obeys every animal impulse without any thought about responsibility to others, or consequences to himself.

The description of some of these cases will be put in such a form as to give an idea of the course that was followed in inquiring into the condition of these unfortunate persons.

It was obviously necessary to have some regular series of questions, or rather a series of subjects about which questions were framed upon the spot, and put in such form as the occasion and circumstances demanded.

Some of the terms used, as will be seen, are borrowed from a system of mental philosophy, which (however undeniable its claims are to have presented the clearest and best analysis of the human faculties ever yet known,) has not been relied upon by the Commissioners in their examination. In speaking of the instinct to oppose and destroy, of the sentiment of self-esteem and love of approbation, the faculty of number, &c., as manifested in the following cases, no reference is had to the question whether there is or is not a proportionate development of those parts of the brain which some able anatomists and keen observers of nature maintain to be the part of the organization which is most immediately instrumental in the manifestation of such instinct, sentiment, or faculty. Indeed, in most cases, the notes were taken before the actual measurements were made. It was thought, however, that the close personal examination of so many idiots presented too rare and important an opportunity for ascertaining their craniological as well as other bodily peculiarities to be lost; and accordingly it was improved, and the general results may be found in the Tables. It may be stated here, in general terms, that the result of this examination and measurement shows that the dimensions of the head, except extreme diminutiveness, and shape whatever, can be relied upon as criteria of idiocy. A few of the worst cases of idiocy are those in which the head is

normal as to size and shape. Nevertheless, the Tables show that, taking the aggregate of all the cases, an obvious relation is seen between the size and development of the cranium, and of its different parts, and the amount of intellectual power, and of the different kinds of mental manifestation.

The results of the observations and measurements are published without any inference being drawn, in order that those who choose to examine and study them may do so.

Some writers have hastily concluded, that because a few idiots, whose heads were smaller than the measure which had been laid down as the minimum of brain by which intelligence could be manifested, have nevertheless been partially educated; and because many others, with heads of normal size and shape, are hopelessly idiotic,—therefore the doctrine of the dependence of mental manifestation upon the structural condition of the brain is overthrown. They say, it has been asserted that persons with heads of a certain size must necessarily remain idiots, and they triumphantly point to certain idiots who have recently been trained to show a certain amount of intelligence, though their heads were smaller than this arbitrary standard.

This conclusion, however, does not seem justified by close and candid observation. *Size* is only *one* of the structural conditions of the brain upon which mental manifestations depend;—*quality* of fibre, health, exercise, &c., are others essentially modifying it. It may very well be that one anatomist and philosopher, who wrote fifty years ago, saying that a man with a head below a certain measurement must necessarily remain an idiot in spite of any means of education *then known*, would be still right in his general conclusions, notwithstanding means are *now* discovered to educe considerable intelligence out of such a supposed idiot. The result of close and extensive observations of idiots has been strongly to confirm, not only the doctrine of the *volume* of brain being one important element in the means of manifesting mental power, but all the main doctrines of that school of philosophy which teaches that God gives us the body not merely as the handmaid of the soul, but weds and welds the two together in bonds of dependence that death alone can sever.

That philosophy has been aptly illustrated by comparing the body to a musical instrument, the soul to an invisible player. It is indeed so; and if the harp have a thousand strings, and they all be kept in tune, then the soul discourses sweet and varied music. But the idiot's body is a wretched thing, and its few strings are so sadly awry, that even in a seraph's hand it could give nothing but jarring and discordant sounds.

The whole of the success which has recently been gained, in attempts to improve the condition of idiots, has arisen from the

adoption in practice of the principles of that much-ridiculed doctrine which teaches that the first thing to be done is to put the *instrument* in tune. Surely, then, the attempt to show what are the material conditions of the bodily instrument in such a number of idiots as have been examined by the Commissioners will not be condemned by candid observers, as such attempts made upon other classes of men have too frequently been.

That the different degrees of keenness and vigour with which different *manifestations* of mind can be made by different individuals, and by the same individual at different times, do, in some way, depend upon the original nature and the actual condition of *some part* of the bodily organization, none are now found foolish enough to deny; that they do depend, moreover, most immediately upon the structure and condition of the brain and nervous system, few will doubt; that there must be some peculiar corresponding outward signs by which the internal structure and condition of the brain and nervous system *may* be known by examination of the outward man, will not be questioned by sagacious observers of nature; that such examination, made upon an extensive scale, can lead to any but good results, will not be asserted by any but the few who think that modern observations should only be made to confirm ancient theories. If it is found that a certain condition of brain is an invariable accompaniment of a certain passion; if the condition is more marked when the passion is strong, less marked when it is weak, and unobservable when the passion is wanting; if, moreover, the condition changes with age, waxing and waning as the passion grows or declines,—then the inference becomes almost inevitable, that there is relation of cause and effect; then the external sign by which such internal structure and condition can be known is as much the natural language of the passion as a smile is the natural language of gladness. Now, to say that, because such signs have not yet been satisfactorily ascertained, therefore they never can be ascertained, and that the attempt to ascertain is impious or foolish, is just what it would have been a few years ago to say that, because a nebula never had been resolved, therefore it never could be resolved; that infusoria never had been seen, and therefore never could be seen; and that to turn a telescope to the sky, or the microscope to the water, was impious and foolish.

But however certain it is, first, that the activity and strength of mental manifestations must depend upon the internal structure and condition of the bodily organization; and second, that his structure and condition, like everything material, must have signs and language,—no reference is had to such signs in the following cases.

When it is said that a certain idiot's instinct to fight and destroy is very active, no reference is had to the fulness of his head about the ears; it is meant simply that he strikes, bites, scratches, or smashes things, and thus proclaims, *in another kind of language*, the activity and strength of the propensity. In order to see how many cases there are of coincidence between the craniological development and the existence of the propensity, reference must be had to the Tables.

W. C., a lad aged thirteen years. **BODILY AND MENTAL CONDITION OF PARENTS.**—The father is a man of scrofulous temperament, and very puny and feeble both in body and mind. Has been insane at times, especially at religious revivals, at which he prays and exhorts.

The mother is of a similar habit of body and mind, and has always been considered a simpleton.

They have one other child, a girl aged twenty, who is a simpleton.

FUNCTIONS OF ASSIMILATION, DIGESTION, GROWTH, &c.—These seem to be pretty active and healthy. He is of the ordinary size, and, though subject to fits when enraged, he has tolerable health.

MUSCULAR VIGOUR, rather below the average.

APPETITE FOR FOOD is insatiable. Unless restrained, he will always so overload his stomach as to bring on fits. He is now limited to a certain ration, which is about double the quantity consumed by other boys of his age. His thirst is also insatiable. He has been known to drink six quarts of water in twenty-four hours.

INSTINCT OF REPRODUCTION does not manifest itself, for he has been carefully watched in this respect.

INSTINCT TO FIGHT AND DESTROY is pretty active. He not only defends himself by striking and scratching, but will rush at things and persons, and push them over. He pulls things to pieces, but does not seem to know how to use his fists to strike, or to handle a stick.

DISPOSITION TO HIDE AND CONCEAL is apparent in the manner in which he disposes of things.

DISPOSITION TO POSSESS AND HOARD is manifested by his claiming his own chair, and his own cup and plate at table; also by carrying apples and fruit to his room, to put them away.

SELF-ESTEEM is not apparent in any of his actions.

LOVE OF APPROBATION is feebly manifested.

GENERAL ACTIVITY OF SENSES.—The five senses are normal, though not acute, except smell.

PERCEPTION OF INDIVIDUAL OBJECTS is feeble. He knows those immediately about him, and the common household things,

but he evidently does not know how to recognise persons and things as other children do.

PERCEPTION OF COLOUR unknown.

PERCEPTION OF NUMBER very imperfect; he could not tell the difference between two, three, four, and five.

PERCEPTION OF TIME feeble.

PERCEPTION OF MUSICAL SOUNDS null.

FACULTY OF LANGUAGE feebly developed. He knows a few words, but has no power to construct a sentence to express his wants. He hardly knows a hundred words.

CAUSATION he seems to have no sense of whatever. The nearest approach is his habit of stealing hot water and putting it away to cool, in order to gratify his thirst.

DISPOSITION TO IMITATE very feeble; he will pick up chips when he sees other persons doing so, but cannot understand a direction to do so.

BENEVOLENCE utterly wanting: the same with Veneration, Imagination, Conscience, Hope of the Future, &c.

Male, aged twenty-four. BODILY AND MENTAL CONDITION OF PROGENITORS.—The mother was a very intemperate prostitute, and not much else is known of her, except that she died of *delirium tremens*.

The father is rather apocryphal.

FUNCTIONS OF HIS GENERAL DEVELOPMENT AND CONDITION OF BODY, imperfect. Head is very small. The extremities are shortened at the end; that is, the bones of the hands, fingers, and feet are very short in proportion to the other bones, as if the central formative power had not been vigorous enough to push the growth to the circumference. He is scrofulous, and often covered with sores, scabs, &c.

FUNCTIONS OF ASSIMILATION, DIGESTION, GROWTH, &c., are pretty efficient.

MUSCULAR VIGOUR seems nearly equal to the average. When sufficient motive is held out, he can do hard work; but the will is wanting, because the nervous energy is wanting.

APPETITE FOR FOOD is healthy as to quality of what he eats, but ravenous as to quantity.

INSTINCT FOR REPRODUCTION is fiercely active and ungovernable, and leads him on blindly to excesses of various kinds. The instinct to fight and destroy seems manifested by his instantly resorting to force to destroy whatever opposes his will—to smash an inanimate object; to kill an animate one, whether it be a fly, a dog, or a child.

Aged twenty-two. The mother of this idiot was a very scrofulous and puny person; she was insane during her gestation with him, and died of consumption soon after his birth. She had

three children. One was a simpleton, and died young. The other, a sister, is almost idiotic.

The father, a healthy man, married a healthy woman for his second wife, and has five healthy and intelligent children by her.

The head of this idiot is exceedingly small, measuring only 17·5 inches in its greatest circumference, 22 inches being the standard.

The other physical peculiarities need not be referred to here. His language is imperfect, like that of a little child. He understands all simple directions given in sentences short as his own.

There is a useful lesson to be learned from this poor youth's history and treatment. He was formerly very irritable and violent when enraged, breaking and destroying things. For this he was treated in the usual way: force was met by force. He was whipped and punished corporally in various ways, for every offence, by any one about him. As he grew older and stronger, the number of those who could whip him with impunity grew less, till at last the father was obliged to become executioner-general, and in the evening gave him a sound drubbing for the divers and sundry misdemeanours of the day. The father spared not the rod, but healed not the child, who, on the contrary, grew worse and worse. The lessons in punishment were not lost upon him. Whatever object offended him, he would beat and punish just as he had been punished. If it were a tool of any kind, he would smash and break it in pieces; if it were a dumb beast, he would beat and abuse it. He smashed rakes, hoes, &c., without number, and one day broke a cow's leg with an axe.

It happened one evening that a zealous member of the Peace Society was a visitor at the house, and witnessed a scene of contest in which the father barely came off victor. The visitor urged the father to follow a different course with his unfortunate son; to abandon all blows, all direct use of force, and try mild measures. By his advice, Johnny was made to understand that, if he should commit a certain offence, he would be mildly and kindly remonstrated with, have nothing but bread and water for supper, and be obliged to lie upon the floor, with only a little straw under him. Very soon he began himself to practise this mode of punishment upon the cattle. If the cow offended him, instead of flying into a passion and beating her, he addressed her gravely, telling her the nature of her offence, and assuring her of the consequences. He would then lead her out, lay some straw upon the ground, bring a little water and a crust of bread, and tell her that was all she could have for supper. One day, being

in the field, he hurt his foot with the rake, and instead of getting angry as he was wont to do, and breaking the instrument to pieces, he took it up mildly but firmly, carried it home, got some straw, and laid the offending tool upon it; then he brought some bread and water, and demurely told the offender that it had been very naughty—that he did not want to hurt it—but it should have no other supper, and no bed to lie upon.

By such means he has been very much improved, not only in behaviour, but in temper. He is growing less violent and more manageable every day.

This is not at all strange; it is not even different from what happens every day with common children. The poor idiot could not understand much of the spoken words by which *reason* manifests itself, but he could understand the *natural language* of all the passions very well; the angry looks, the harsh voice, the threatening gesture, were felt in the full force of their meaning, and they roused in him the answering feelings of fear, rage, or revenge. These feelings, being called into frequent action, grew more prompt and more fierce by every day's exercise, and would at last have come to be spontaneously and habitually active. But, by withdrawing from before his eyes the natural language of those passions in others, his own were no longer awakened.

As a fierce dog sleeps quietly amid the din of other sounds, but rouses up with defiant growl at the angry bark of another dog, so anger sleeps quietly in our nature, unmoved by anything except the *language of its kind* in another person, which language it understands and answers in a moment. We may make this, and other like passions, sleep so long and so soundly, that they will grow feeble, and even die out; or we may rouse them up so often that they cannot sleep, even when we will them to do so. The moral of this idiot's history will not be lost upon those whose passions became so restive before they were aware of their nature as to be a source of perpetual trouble in after-life, when the moral sense had become awakened to the necessity and the difficulty of self-control.

SIMPLETONS ARE THE HIGHEST CLASS OF IDIOTS, IN WHOM THE HARMONY BETWEEN THE NERVOUS AND MUSCULAR SYSTEM IS NEARLY PERFECT; WHO CONSEQUENTLY HAVE NORMAL POWERS OF LOCOMOTION AND ANIMAL ACTION; CONSIDERABLE ACTIVITY OF THE PERCEPTIVE AND AFFECTIVE FACULTIES, AND REASON ENOUGH FOR THEIR SIMPLE INDIVIDUAL GUIDANCE, BUT NOT ENOUGH FOR THEIR SOCIAL RELATIONS.

As the class of fools is much larger than that of idiots, so that of simpletons is much larger than that of fools. Indeed, it is very difficult to estimate their number, or to say what persons

shall be included in it, for they can only be measured by a sliding scale, with a standard adapted to different localities and conditions of society. A Russian serf, a Bavarian boor, enjoy his sinecure office of citizen, and fill his narrow circle, with a paucity of intellect such as would incapacitate man for political rights or social relations in Massachusetts among the inhabitants of the *least* intelligent and active population of Massachusetts, a youth might be thought to tolerable capacity, be permitted to go to the polls, and even society, who would be rated as a simpleton, and treated as in the active and bustling crowd of one of our thriving where the weak sink down and disappear, and the strong live and thrive. And so it may be with regard to time; and hence, the standard of intellect and of knowledge may be so high as to exclude from the polls, as simpletons, men of some of our generation who consider themselves qualified only to be citizens, but to hold offices. Who would arrest progress, provided no qualification but that of knowledge and virtue could ever be required!

The persons put down in this Report as simpletons, are about whom there could be no doubt, even in this day and generation. They are persons the highest of whom should be considered unable to take any responsibility, to contract matrimony or to vote. The latter tests, however, should never be applied to interested parties. Some of the simpletons in the list have been wheedled into matrimony, and the bond afterwards cancelled, though nobody can tell how many continue unimpaired. Politicians, too, are sometimes as blind as lovers to the demerits of a head which can command a hand. Several instances have occurred where the taxes were paid for *simpletons*, and they voted—until the opposite party showed that they had a number of *fools* whom they could qualify and bring to the polls, and then the poor creatures, who had been used to violate the purity of the ballot and to defraud an election, were thrown into contempt.

It has been the aim to include in this Report none who would be considered by impartial persons as *compos mentis*. They are susceptible of great improvement, and could be made useful and reputable men, but they cannot be taught in common schools, or trained in the common way.

The following cases will serve as specimens:—

H. C. F., aged thirty-three. PARENTAGE.—His mother extremely intemperate for several years before his birth; she continued to be so for years afterwards, and died of *delirium tremens*. Condition of father not known.

FUNCTIONS OF DIGESTION, ASSIMILATION, GROWTH, &c.

tolerably well performed. His body is pretty well developed, and his health generally good.

MUSCULAR VIGOUR is impaired by a singular affection of his nervous system, which gives to him the *air, gait, and appearance of a drunken man!* He seems to have inherited from his mother a strong resemblance to her acquired habit of body. He trips and staggers in his walk, and frequently falters in his other motions. The nervous fluid seems to flow unsteadily from the brain, or to be frequently wanted; hence the motions of his muscles are suddenly checked, his jaw is arrested in the act of chewing, his lips in the act of speaking; or, if walking, and the stoppage is considerable, he stumbles, perhaps falls down. Sometimes he remains insensible for a minute or two, and is afterwards utterly unconscious of what passed. More often the command of one muscle, or of one side, is lost for an instant, and he is obliged to hitch and wriggle along with the others. Thus the poor creature drags himself about, a living monument of his mother's shame.

APPETITE FOR FOOD is almost insatiable, and he is very gluttonous. It is said that his mother used to give him rum when he was an infant.

INSTINCT OF REPRODUCTION does not manifest itself in an unnatural degree.

INSTINCT TO FIGHT AND DESTROY is not over-active. He does not desire to break things, as some idiots do, but he is ready to fight in self-defence.

INSTINCT TO POSSESS AND HOARD displays itself in his readiness to store up food.

DISPOSITION TO HIDE AND CONCEAL shows itself in the cunning with which he compasses his purpose of obtaining things to eat, and of shirking work.

SELF-ESTEEM is manifested in various ways.

LOVE OF APPROBATION is the sentiment most acted upon by those who have the charge of him. To secure the praise and flattery of others, he will do anything in his power.

GENERAL ACTIVITY OF THE FIVE SENSES is normal.

PERCEPTION OF COLOUR is about as usual.

PERCEPTION OF THE RELATIONS OF NUMBERS is very imperfect. He can count off, by rote, even to a hundred, but can scarcely tell how much two added to three will make.

PERCEPTION OF TIME is feeble. He keeps step pretty well in walking, but is perplexed in estimating the passage of time.

SENSE OF MUSICAL RELATIONS feeble; he never attempts to sing.

FACULTY OF LANGUAGE is imperfectly developed. He knows the names of individual objects and persons and can use com-

mon sentences, but does not use involutions and complicated expressions.

CAUSALITY seems active in proportion to his other faculties. He can build a fire, wash potatoes, and put them to boil for breakfast, and do similar simple household acts.

DISPOSITION TO IMITATION is not so active as in most persons of his class. Provided he attains an object or an end, he does not seem to care whether he proceeds in the same way that others do or not. In some idiots, this disposition is very strongly marked.

BENEVOLENCE (so little manifested by most idiots) seems active in this man. He is very tender-hearted. His pity is easily excited. He gives away readily of whatever he has.

VENERATION is but feebly manifested. He cares little for his parents, or his elders and superiors—of course, nothing for God.

CONSCIENCE is feebly developed, and he cannot be governed by appeals to it. *Hope* reaches not beyond the things of this life: scarcely beyond the things of to-day.

A. B., woman, aged fifty-five, not a pauper. PARENTAGE, &c.—Her grandmother was insane, and finally became idiotic. Her mother and all her brothers and sisters are puny and consumptive. Her youngest sister is stunted in growth, and scarcely *compos mentis*.

FUNCTIONS OF ASSIMILATION, GROWTH, &c., are imperfectly performed. She is humpbacked and nervous.

MUSCULAR VIGOUR, below average; she is incapable of bearing much fatigue.

APPETITE FOR FOOD is natural as to quantity, but her taste has become perverted by use of tea, coffee, spices, &c.

INSTINCT OF REPRODUCTION apparently active, though great pains have been taken to prevent its development. Character is in this respect good.

INSTINCT TO FIGHT AND DESTROY is manifested in the degree usual with children. She shows passion sometimes, and if injured retorts, and immediately assails the offender.

DISPOSITION TO POSSESS AND HOARD is not shown in its usual activity; for, though she is desirous of possessing and owning things, she cares not to retain them long.

DISPOSITION TO HIDE AND CONCEAL shows itself not only in regard to material objects of possession, but sometimes in hypocritical conduct. She will put on certain airs in order to conceal some purpose which she may have.

SELF-ESTEEM is very strongly manifested by its usual natural language. If her simple understanding could be convinced twenty times in a day that she is sadly deficient in everything of which people are usually vain, it would make no difference; self-

esteem springs up again as elastic as ever, and makes her regard herself with great complacency.

LOVE OF APPROBATION is one of the most prominent traits in her character. To gain the attention and praise of others, she will do things that would otherwise be very disagreeable to her.

TENDENCY TO IMITATION is very strong indeed. She does things as she has seen others do them; imitates their actions; and nothing but their example wins her from continual repetition of the same thing, in the same manner that she once learned to do it.

THE GENERAL ACTIVITY OF THE SENSES is normal.

PERCEPTION OF INDIVIDUAL OBJECTS, within a certain range, is good. She recognises most of the individuals of the village, and common things about her; but then her circle is narrow, and beyond it she takes no notice of differences between individual objects.

PERCEPTION OF COLOURS is not vivid, but no striking want of power noticed.

PERCEPTION OF NUMBERS limited. With the assistance of objects, she can count a score or two, as the number in a pile of plates, the stitches on a knitting needle; but she cannot count or reckon abstractedly without the aid of objects. She can count, for instance, a pile of ten or fifteen cents, but cannot tell how many cents are in two or three half-dimes. She cannot make change, therefore, or reckon higher than ten, even with the aid of her fingers.

PERCEPTION OF TIME feeble; she can tell the hour by the clock, but without idea of measuring the lapse of time by it.

PERCEPTION OF MUSICAL SOUNDS is apparent in her. She sometimes hums a tune; but no fondness for music has been engrafted upon this capacity, which might have been done.

FACULTY OF LANGUAGE is not well developed; and her range of words is limited, though she can make simple sentences very well.

PERCEPTION OF CAUSATION is very feeble.

BENEVOLENCE AND CONSCIENCE are feebly manifested.

HOPE is very feeble; the horizon of her future is bounded by to-morrow.

The cases thus very imperfectly sketched, will serve to give an idea of the different classes of idiotic persons, and of the mode in which the inquiry into their condition was pursued. But they are strongly marked cases each of its kind, and it must not be supposed that all idiotic persons can readily be ranged in one or other of these classes. The highest of the lower class of Idiots can hardly be distinguished from the Fool; the least

stupid of Fools can hardly be distinguished from the Simpleton; and the highest among Simpletons stand very near the level of hundreds who pass in society for feeble-minded persons, but still for responsible free agents. These latter, indeed, are looked down upon by the crowd; but, then, the crowd is looked down upon by tall men; and these, in their turn, are looked down upon by the few intellectual giants of each generation, who stand higher by the whole head and shoulders than the rest.

This view of the gradation of intellect should teach us not only humility, but humanity; and increase our interest in those who are only more unfortunate than we are, in that their capacity for seeing and understanding the wisdom, power, and love of our common Father, is more limited than ours, in this stage of our being.

It is thought best not to close this Report without alluding to some

CIRCUMSTANCES OR CAUSES WHICH PREDISPOSE
PERSONS TO IDIOCY.

This is a difficult subject, requiring more scientific research and accuracy than this Report can pretend to. Some facts, however, which have been observed, and some thoughts which have suggested themselves, may possibly be of use to others who follow in this field. When certain circumstances are noted as *preceding* idiocy, it is not meant that they certainly caused it; indeed, it is hard to say that any one cause or condition in a parent will produce idiocy in the offspring; nevertheless, a number of causes united may do it. For instance, take the case—

Wm. B., aged thirteen, which is one of idiocy of the lowest kind. This boy cannot walk alone, and can hardly creep about. Has no speech, though some of his natural signs can be understood. He cannot feed himself with a spoon, but can cram food into his mouth with his fingers. His head is very small. His intellect is almost null, and of course the affective faculties are not manifested.

In searching for accompanying circumstances which may throw light upon the probable causes, it is found that the father was a very intemperate man. This is not enough, for all intemperate men do not have idiotic children. His wife was related to him by blood, though not within the degree of first cousin; and still less was this a sufficient cause for the idiocy of the son. The wife's family was tainted with idiocy, her aunt having an idiotic child. We find, therefore, both intermarriage and idiotism in the family; but still this was not cause sufficient, because the parents of this boy had seven other children, all of tolerably good parts.

Looking at the mother's condition during gestation, it is found that, at an early period of it, she was several times very much agitated by terror and mental distress; that at a later one, she became ill, and had great difficulty in carrying her child to its full period; and finally, that her confinement was very long, protracted, and painful.

May it not be that these circumstances caused idiocy in this case, though they might not do so in ordinary cases, where the temperance, or the intermarriage, or the tainted blood, or all of them, were wanting? May it not be, likewise, that *any one* of these circumstances occurring alone,—the intemperance, the intermarriage, the family taint, the fright, the illness, or the long and difficult parturition,—though it would not cause idiocy, or have any very manifest effect, might, nevertheless, materially *diminish* what would otherwise have been the bodily and mental vigour of the offspring?

With this explanation, and with the understanding that *probability*, and not *certainly*, is aimed at, mention will now be made of some of the *immediate causes* of idiocy; among which by far the most prolific one is

THE LOW CONDITION OF THE PHYSICAL ORGANIZATION OF ONE OR BOTH PARENTS.

It is said by physiologists, that among certain classes of miserably-paid and poorly-fed workmen, the physical system degenerates so rapidly, that the children are feeble and puny, and but few live to maturity; that the grandchildren are still more puny; until, in the third or fourth generation, the individuals are no longer able to perpetuate their species, and the ranks must be filled up by fresh subjects from other walks of life, to run the same round of deterioration.

It would seem that startled nature, having given warning, by the degenerated condition of three or four generations, at last refuses to continue a race so monstrous upon the earth.

We see here another of those checks and balances which the boundless wisdom of God pre-established in the very nature of man, to prevent his utter degeneration. As the comet, rushing on towards the sun, is, by the very velocity which it gains, and which seems hurling it into the burning mass, carried safely beyond,—so a race of men, abusing the power of procreation, hurry on in the path of deterioration until, arriving at a certain point, a new principle develops itself, the procreating power is exhausted, and that part of the human family must perish, or regain its power by admixture with a less degenerate race.

It will be seen by the Tables, that by far the greater part of

the idiots are children of parents one or both of whom were of scrofulous temperament, and poor, flabby organization. It is difficult to describe exactly the marks which characterize this low organization, but the eye of a physiologist detects it at once. Regarding it as a matter relating to the mere animal man,—if a farmer had swine, cattle, or horses, as inferior to others of their kind as many of these people are inferior to other men and women, he would pronounce them unfit to breed from. Such persons are indeed unfit to continue the species, for while they multiply the number, they lessen the aggregate powers.

In saying that such persons are generally scrofulous, the word is used in its popular sense, without any pretension to pathological accuracy. Indeed, it is difficult to give a correct idea of scrofula, because its symptoms are so manifold and so various. The class of persons to whom reference is made may be known by several signs. They do not stand erect and firm; they seem rather to be trying to hold their head and shoulders up by their muscles, than to rest firmly and gracefully poised upon the spinal columns and lower extremities.

Red and sore eyelids, turgid lips, spongy gums, swellings in the glands, liability to eruptions and diseases of the skin, mark this class of persons. The skin is generally fair; the muscles flabby; the hair is light,—seldom hard, crispy, and strong. They are not liable to fevers and violent inflammations, as others are; but, when unwell, nature relieves herself by sores, ulcers, eruptions, &c.

The peccant humours show themselves upon the surface in various ways—swellings and ulcerations of the glands, blotches, tetter, ringworms, rash, salt rheum, &c.

But it is not the surface alone that is affected; the internal tissues are often vitiated, and show their morbid tendencies by various affections, of which cancer is the worst.

Great pains have been taken to ascertain the physical peculiarities of the blood relatives of most of the idiots whose names are upon the list. In reading over the description of more than four hundred families in which idiots are found, one is struck with the great number of cases in which the affections abovenamed are found. A few cases will give a better idea than any general description can do:—

F. D., aged four and a half years. This child is a poor, puny, and scrofulous creature. Her head is very small, being only sixteen inches in circumference. She is quite idiotic, as might be expected with a head of such dimensions, upon a frame so weak and low-toned. She is very feeble in the spine; her right side is torpid, and right arm seems paralysed. Her family is very thrifless and dirty, and presents the spectacle,

so rare in this country, of sharing their room with the pigs and poultry.

The father is afflicted with salt rheum and other humours, which seem to affect his whole system, and make him dyspeptic and wretched.

The mother is a feeble creature, whose skin is covered with eruptions. One of her children, sister of F. D., lately died from a virulent cancerous affection.

Abner and Palmyra H., a brother and sister, aged thirty-three and forty-three, both idiotic. Heads small. Bodies of feeble and flabby fibre. The bones of the extremities seem shortened—that is, out of proportion as to length, compared to the body. They are both afflicted with scrofulous humours and sores.

The man shows some of those remarkable signs, often manifested by idiots, of the instincts which one can suppose men would have in the undeveloped animal stated. When a boy, he had a passion for *burrowing in the earth like a rabbit*. He still, at times, will wander off into the woods, dig a hole as for a cellar, collect wood, and go on for days with this occupation, until discovered and brought home.

The general appearance of these idiots is said to be remarkably *like that of their parents when they were in their long drunken debaucheries*.

Both the parents were of unhealthy habit of body, troubled with scrofulous humours, St. Anthony's fire, *rum-sores* (as they are called), and other eruptions. All these natural impurities were made worse by intemperance in drink and depravity of life. By temperance, cleanliness, and careful observance of all the natural laws, they might have corrected the vicious humours of their bodies, lived pleasant lives, and been blessed with children to comfort their old age; but they chose to outrage nature in every way, and she sent them their punishment in the shape of those idiotic children.

Cynthia T., a girl of eighteen years old, idiotic. She was deformed at birth about the eyes and nose. She still shows the marks of a very scrofulous temperament. The bones of the hands and feet are shortened, and the ends seem as if they had been *gnawed* off. The upper edges of the frontal and parietal bones seem shortened, thus reducing the size of the upper part of the brain, or rather, perhaps, being reduced by its non-development.

Her parents, uncles and aunts, cousins, &c., are afflicted more or less with St. Anthony's fire, salt rheum, cancerous sores, &c.

Her father, as if his constitution was not corrupt enough,

poisoned it still more by liquid fire. He has an *idiotic cousin*, who resembles C. T. in many respects.

In seeking for the causes which lead to this sad deterioration of families, it will be found that the most prominent and prolific is

INTEMPERANCE.

By inspection of the Tables, it will be seen that, out of 359 idiots, the condition of whose progenitors was ascertained, 99 were the children of drunkards. But this does not tell the whole story by any means. By drunkard is meant a person who is a notorious and habitual sot. Many persons who are habitually intemperate do not get this name even now; much less would they have done so twenty-five or thirty years ago; and many of the parents of the persons named in the Tables have been dead longer than that time. A quarter of a century ago a man might go to his bed every night muddled and sleepy with the effects of alcohol, and still not be called an intemperate man.

By pretty careful inquiry as to the number of idiots of the lowest class whose parents were known to be *temperate* persons, it is found that *not one quarter* can be so considered.

The effect of habitual use of alcohol seems to be to *lymphatize* the whole bodily organization; that is, to diminish the proportion of the *fibrous* part of the body—to make the *lymph* abound in all the tissues. The children of such persons are apt to be of the scrofulous character above described; and *their* children are very apt to be feeble in body and weak in mind. Idiots, fools, and simpletons are common among the progeny of such persons. Thus, directly and indirectly, alcohol is productive of a great proportion of the idiocy which now burdens the commonwealth. If, moreover, one considers how many children are born of intemperate parents, who, without being idiots, are deficient in bodily and mental energy, and are *pre-disposed by their very organization* to have cravings for alcoholic stimulants, it will be seen what an immense burden the drinkers of one generation throw upon the succeeding. Many a parent, by habitual stimulus applied to his own nervous system, forms and fashions his child in such wise that he is more certain to be made a drunkard by the ordinary temptations of life than the child of a temperate man would be, *even* if living from his youth upward within the temptations of a bar-room.

Probably the habitual use of alcoholic drinks does a great deal to bring families into that low and feeble condition of body alluded to in the preceding section as a prolific cause of idiocy.

There is another vice,—a monster so hideous in mien, so dis-

gusting in feature, altogether so beastly and loathsome, that, in very shame and cowardice, it hides its head by day, and, vampyre-like, sucks the very life-blood from its victims by night; and it may perhaps commit more direct ravages upon the strength and reason of those victims than even intemperance,—and that vice is

SELF-ABUSE.

One would fain be spared the sickening task of dealing with this disgusting subject; but as he who would exterminate the wild beasts that ravage his fields must not fear to enter their dark and noisome dens, and drag them out of their lair,—so he who would rid humanity of a pest must not shrink from dragging it from its hiding-places, to perish in the light of day. If men deified him who delivered Lerna from its hydra, and canonized him who rid Ireland of its serpents, what should they do for one who could extirpate this monster vice? What is the ravage of fields, the slaughter of flocks, or even the poison of serpents, compared with that pollution of body and soul, that utter extinction of reason, and that degradation of beings made in God's image, to a condition which it would be an insult to the animals to call beastly, and which is so often the consequence of excessive indulgence in this vice?

It cannot be that such loathsome wrecks of humanity as men and women reduced to drivelling idiocy by this cause, should be permitted to float upon the tide of life, without some useful purpose; and the only one we can conceive is that of awful beacons to make others avoid,—as they would eschew moral pollution and death,—the course which leads to such ruin.

This may seem to be extravagant language; but there can be no exaggeration, for there can be no adequate description even, of the horrible condition to which men and women are reduced by this practice. There are among those enumerated in this Report some who not long ago were considered young gentlemen and ladies, but who are now moping idiots,—idiots of the lowest kind; lost to all reason, to all moral sense, to all shame,—idiots who have but one thought, one wish, one passion,—and that is, the further indulgence in the habit which has loosed the silver cord even in their early youth—which has already wasted, and, as it were, dissolved, the fibrous part of their bodies, and utterly extinguished their minds.

In such extreme cases there is nothing left to appeal to—absolutely less than there is in the dogs and horses, for they may be kept upon by fear of punishment; but these poor creatures are beyond all fear and hope, and they cumber the earth awhile, living masses of corruption.

If only such lost and helpless wretches existed, it would be a

A knowledge of the extent to which this vice prevails astonish and shock many. It is indeed a pestilence which walketh in darkness, because, while it saps and weakens higher qualities of the mind, it so strengthens low cunning and deceit, that the victim goes on in his habit unsuspected, until he is arrested by some one whose practised eye reads his sin by the very means which he takes to conceal it—or until all shame is for ever lost in the night of idiocy, with which the victim so early closes.

Many a child who confides everything else to a loving parent conceals this practice in his innermost heart. The daughters who dutifully, conscientiously, and religiously themselves to father, mother, or priest, on every other subject never allude to this. Nay, they strive to cheat and deceive by false appearances; for, as against this darling sin,—dissimulation, science, and religion, are all nothing. They even think of God, or cheat themselves into the belief that He who is all-seeing eyes than to behold iniquity can still regard their sin with favour.

Many a fond parent looks with wondering anxiety upon the puny frame, the feeble purpose, the fitful humours of a daughter, and, after trying all other remedies to restore him to vigour of body and vigour of mind, goes journeying about from place to place, hoping to leave the offending cause behind, while the victim hugs the disgusting serpent closely to his bosom, and conceals it carefully in his vestment.

The evils which this sinful habit works in a direct and open manner are not so appreciable, perhaps, as that which it effects in an indirect and negative way. For one victim which

insidious and pernicious habit. The symptoms of it are easily learned, and, if once seen, should be immediately noticed.

Nothing is more false than the common doctrine of delicacy and reserve in the treatment of this habit. All hints, all indirect advice, all attempts to cure it by creating diversions, will generally do nothing but increase the cunning with which it is concealed. The way is, to throw aside all reserve; to charge the offence directly home; to show up its disgusting nature and hideous consequences in glowing colours; to apply the cautery seething hot, and press it on to the very quick, unsparingly and unceasingly.

Much good has been done of late years by the publication of cheap books upon this subject. They should be put into the hands of all youth suspected of the vice. They should be forced to attend to the subject. There should be no squeamishness about it.

There need be no fear of weakening virtue by letting it look upon such hideous deformity as this vice presents. Virtue is not salt or sugar, to be softened by such exposure, but the crystal or diamond that repels all foulness from its surface. Acquaintance with such a vice as this,—such acquaintance, that is, as is gained by having it held up before the eyes in all its ugliness,—can only serve to make it detested and avoided.

Were this the place to show the utter fallacy of the notion that harm is done by talking or writing to the young about this vice, it could probably be done by argument—certainly by the relation of pretty extensive experience. This experience has shown that, in ninety-nine cases in a hundred, the existence of the vice was known to the young, but not known in its true deformity; and yet, in the hundredth, the repulsive character in which it was at present made it certain that no further acquaintance with it would be sought.

There is one mode of treatment, however, often recommended by physicians, which in many cases deserves only denouncement as erroneous or sinful—that is, causing the victim to contract matrimony. The cure is generally effectual, and the mode in which it is accomplished may, in some cases, be justifiable; but certainly, in many others, the retribution of offended nature is just, and seems like a whole volume of revelation of God's purpose. In no less than ten cases which are here recorded, the folly of the children was manifestly attributable to this sin of parent. Now, if a cause which would be so carefully concealed, is brought out in these ten cases, in how many more must have been at work unnoticed and unsuspected! And if these extreme cases of idiocy have been the visitations upon the

children of the sins of the parents, how many times to must there be where the visitation is less severe, but still How much bodily disease and weakness; how much obliquity and imbecility; how much of ungovernable l thrown upon the children of this generation by the vices fathers and mothers of the foregoing one!

There is one remarkable and valuable fact to be lea specting this vice, from observation of idiots, and that some of them, though they have no idea of right and w sense of shame, and no moral restraint, are nevertheless free from it. They could never have been in the practi else they would never have abandoned it.

From this may be inferred, that it is a pest generally dered by too intimate association of persons of the sa that it is handed from one to another like contagion; a those who are not exposed to the contagion are not l contract the dreadful habit of it. Hence we see that r propriety and decency, but motives of prudence, requir train up all children to habits of modesty and reserve. C as they approach adolescence, should never be permitted together. Indeed, the rule should be—not with a view preventing this vice, but in view of many other consider that after the infant has left its mother's arms, and b child, it should ever after sleep in a bed by itself. Tl children grow, and the nearer they approach to youth, tl important does this become. Boys even should be ta shrink sensitively from any unnecessary exposure of perso each other; they should be trained to habits of delicacy a respect; and the capacity which nature has given to becoming truly modest and refined, should be cultivated utmost. Habits of self-respect, delicacy, and refineme regard to the person, are powerful adjuncts to moral they need not be confined to the wealthy and favoured they cost nothing; on the contrary, they are the seeds wh be had without price, but which ripen into fruits of enj that no money can buy.

INTERMARRIAGE OF RELATIVES.

In assigning this as one of the remote causes of idio not meant that, even in a majority of cases, the offspring riage between cousins, or other near relations, will be The cases are very numerous where nothing extraordinar servable in the immediate offspring of such unions. other hand, there are so many cases where blindness, d insanity, idiocy, or some peculiar bodily or mental defici seen in such offspring, of the first or second generation, t

is forced to believe they cannot be fortuitous. Indeed, the inference seems to be irresistible, that such intermarriages are violations of the natural law, though not such flagrant ones as always to be followed by *obvious* and severe punishment. If two tall cousins, who are both in good health, and free from any marked predisposition to any disease or infirmity, should marry, the probability is, that their immediate offspring will have tolerably good constitutions—though no one can say how *much less* vigorous in body and mind they are than would have been offspring born to either parent from marriage with some one of another healthy family. On the other hand, if a man in whose constitution there lurks a predisposition to any particular disease of body or mind, inherited from his *father's* family, should marry a daughter of his *father's* brother or sister, there would be a strong probability that the disease or infirmity would appear in the offspring; while the probability of such reappearance would be less if he married a healthy cousin by his *mother's* side, and still less if he married a person free from all unhealthy predispositions, who was not related to him at all.

It is seen by the Tables that, out of 359 cases in which the parentage was ascertained, 17 were *known* to be the children of parents nearly related by blood; but as many of these cases were adults, it was sometimes impossible to ascertain whether their parents, who are dead, were related or not before marriage. From some collateral evidence, we conclude that at least 3 more cases should be added to the 17. This would show that more than one-twentieth of the idiots examined are offspring of the marriage of relations. Now, as marriages between near relations are by no means in the ratio of 1 to 20, nor are even, perhaps, as 1 to 1000 to the marriages between persons not related, it follows that the proportion of idiotic progeny is vastly greater in the former than in the latter case—that is, taking this limited number of 400 for what little it is worth as data for calculation. When it should be considered that idiocy is only *one* form in which nature manifests that she has been offended by such intermarriages. It is believed by some, that blindness, deafness, imbecility, and other infirmities, are more likely to be the lot of the children of parents related by blood than of others. If so—and it seems likely that it is—then the probability of unhealthy or firm issue from such marriages becomes fearfully great, and the existence of the law against them is made out as clearly as though it were written on tables of stone.

The statistics of the 17 families, the heads of which, being blood relatives, intermarried, tells a fearful tale.

Most of the parents were intemperate or scrofulous; some were both the one and the other; of course, there were other causes to

increase chances of infirm offspring, besides that of the intermarriage. There were born unto them *ninety-five* children, of whom FORTY-FOUR were idiotic, twelve others were scrofulous and puny, one was deaf, and one was a dwarf! In some cases, all the children were either idiotic, or very scrofulous and puny. In one family of eight children, five were idiotic.

ATTEMPTS TO PROCURE ABORTION.

It appears that out of the idiotic persons examined, at least *seven* were probably made so by attempts, on the part of their mothers, to procure abortion. We say *at least* seven, because it is natural to suppose that, in most cases, every effort would be made to conceal the crime; in many cases the circumstances, even if generally known at the time, would be forgotten in the course of a few years, so that those who had the charge of an idiot twenty or thirty years of age would hardly go back to causes preceding his birth in giving to a stranger an account of the case.

If, then, with all these inducements for secrecy, and all these liabilities to forgetfulness, we find that seven out of about four hundred idiots were made so by attempts at abortion, the probability is very strong that others, whose history we do not know, were made idiotic by the same dreadful crime. Attempts are sometimes made by young women to conceal their shame by getting rid of their unborn proof of it; but, failing in this, they get married, and the child is idiotic, though all children born afterwards of the same parents are sound and healthy. Several cases of this kind are among those above alluded to. One woman had *seven* sound children, and another had *six*, born in wedlock, though the oldest child of each of them, upon whom abortion was attempted, was idiotic.

This subject is indeed most painful. It is horrible to think that a mother should aim a blow at the life of her unborn babe, and, failing of murder, wound and maim his soul, and bring forth a drivelling idiot to be a life-long witness against her crime. But such is one of the forms in which the fruit of sin reappears to punish the sinner and forewarn all beholders.

There is nothing which nature so carefully guards as the life of her creatures. This must be secured, if necessary, at the expense of everything else. This care is manifested from the first moment of conception. The tender being, hidden in the innermost and vital centre of its mother, floating in an elastic fluid, and carefully enveloped, fold within fold, by curious membranes, is not only beyond her reach, but almost beyond the reach of accident. She may fall—her bones may be broken—she may be wounded even unto death—and her babe be still safe. She may, it is true, affect its health by her own intemperance in food or

drink; she may affect its passions by indulging her own; but still it lives.

Now, the attempt to destroy what nature so carefully guards is a most dangerous one; and it can only succeed by using medicines or measures of such violence that the whole system is shaken to its centre, and the life of the mother put in peril in order to kill the babe. The attempts, however violent, may fail; they do fail, perhaps, oftener than they succeed; but, alas! the poor innocent who has escaped murder has not escaped injury. It cannot be doubted that many are made idiotic, and more have their faculties impaired and their bodies injured, by attempts at this unnatural crime.

Sceptical persons may naturally inquire how it is possible for the Commissioners to procure any reliable information concerning matters of this kind, since the parties would not be likely to criminate themselves. It is to be recollected, however, that most of such persons are very ignorant and indiscreet; that some of them do not perceive any guilt in an attempt to destroy evidence of shame; that women are very communicative; and that an inquisitive person, whose object was evidently only to learn all he could about the idiotic child, solely with a view to the good of that child, would obtain evidence not easily obtained from others.

Matters like these soon become known among the friends and neighbours of the parties, if they are of the ignorant class, and are spoken about without much reserve.

It may be said about this, as about supposed causes of idiocy referred to above, that great care has been taken to obtain evidence; that much has been suppressed which was deemed doubtful; and that the rest is given with such explanations of its source, that each one may place upon it as much reliance as he thinks it deserves.

We have thus alluded to some of the most obvious and fertile causes (either remote or proximate) of the existence of such a vast number of idiots as are found in this, and all other civilized countries. It would swell this Report to volumes, to examine these causes pathologically and minutely. Scientific research has not been our object; but we have sought diligently every item and scrap of knowledge upon the subject of idiocy which could be of practical use to the Legislature. In so doing, we have been obliged, in some cases, to drag, as with a net, the deeper depths of society, seeking for the pearls of truth. With these pearls there may be much worthless trash, but this will all perish, while the gems will remain indestructible; and if they are of value enough to redeem only one human being from the foolishness of idiocy, our labours will not be in vain.

ART. II.—ON SUICIDE.

If it were possible to be satisfied with the popular n suicide—"that self-murder is sometimes committed with sign of mental disease, and sometimes with symptoms in such malady"—there would not be any necessity to invest subject. But we contend that the occasional verdicts of juries furnish the best proof that there still exists mu ignorance in the mind of the community, on the *mors voi* than, for the sake of humanity, ought to prevail.

Cicero, looking with a philosophic eye on the subject, have regarded the fact, that no one could be sane who w of self-murder.* A careful examination of his ideas wi show that he had formed a sound opinion as to the impr of suicides being in a normal condition of mind; for he tr "The first thing we should understand is, that every anir itself, which, although it be a proposition not to be ca doubt," &c. "How," he continues, "can it ever be unda imagined for a moment that there can be any animal tl itself? for contraries would thereby arise, when that the soul arises advisedly to take something to itself hurtful to itself; when it does so for its own sake, it *hate and love itself at the same time, which is im* And yet such a contradictory view of the subject obvious, when the different verdicts of coroners' ju recorded. By their decision, we must understand th exist cases of self-destruction in which the perpetrato with a species of *prepenae* against themselves, without a cient real or imaginary cause, committed suicide, and reason they record the verdict of self-murder (*felo-de* these supposed deliberately guilty personages were, i quence, buried in unconsecrated ground, or without a service. On the other hand, when there has been unmi evidence of mental aberration, and some presumptive that there existed actual disease of the brain, then thei nounced a verdict of "temporary insanity."

We shall, however, submit evidence to prove that in al

* "Primum est intelligamus omne animal seipsum diligere intelligi, aut cogitari esse aliquod animal, quod se oderit? nec dem, si quis sibi ipsi inimicus est, eum quæ bona sunt mala putare, l quæ mala: et quæ appetenda fugere; et quæ fugienda appetere . . dolore moventur, alii cupiditate, iracundia etiam multi efferuntur: mala scientes ruunt, tamen se optimè sibi consulere arbitrantur."-*Finibus Boni et Mali*, lib. v. par. 17, p. 147, c., &c.; Edition de la Rev small folio.

es there is an abnormal condition of the mental faculties, and t when there is not any manifestation of actual disease, there y be certain indications of functional derangement of the brain, reat visceral disturbance, producing sympathetic disturbance of intellectual and moral attributes. Suicide can never be com- ted when the mind is perfectly healthy, as in such condition strong instinctive love of life tends to render men careful of ring themselves by the infliction of pain ; and, therefore, when attempt is made to destroy life itself, by whatever methods it be effected, this can never take place in those who are actually s. There is not anything startling or novel in this proposition ; we shall endeavour to confirm the soundness of it, by showing the predisposing causes of suicide are similar to those which oe the various forms of insanity—namely, ungovernable pas- s, as disappointed ambition, excessive pride, the love of fame, the irritation experienced when it is not realized ; from sudden res of fortune ; from grief, or anxiety, or strong apprehension of ger ; from fear, despair, and melancholy ; from unmerited dis- or contempt ; and from jealousy, envy, and hatred. It may be induced by imperfect or confused religious perceptions. If e and other exalted conditions of the mental faculties are mani- tions of their abnormal states in acknowledged forms of nity, and if they also are proved to co-exist in suicidal cases, can we contend that, in the first instance, the disturbed tal functions are indicative of disease ; and, in the second, they sometimes originate in mere waywardness, without any rmal state of mind ? The very fact that self-destruction is rictically opposed to a strong instinctive law of our nature— law of self-preservation—warrants the inference that there are any suicidal cases which occur when there exists perfect ty. To comprehend the phenomena, we must test them he admitted laws of physiology and by the accurate induc- s of psychology, even should we seem to run counter to lar prejudices, but which, on the contrary, will prevent h of the confusion which still exists on the subject.

very one who had observed and thought, would admit the- osed means of testing the data as being the most suitable to ar, the investigation of practical importance ; for instance, in of sudden suicide there is evidence of some disturbing in- oe, which had more or less affected the bodily or mental h, whilst in others, which had been long premeditated, these itions have been still more obvious. It is therefore essential curacy that we trace the various morbid agencies, physical oral, which have induced some change in the mental consti- a. This must be done by a rigid inquiry into the personal ry of each self-murderer ; and by these means we may learn

. XI.—NEW SERIES. D D

to distinguish the difference of a series of remote causes from those which had seemingly been the immediate and exciting cause for the commission of the act.* We therefore think that, for the purpose of classification, the views of M. Esquirol are worthy of consideration. He regards the two forms of suicide as *acute* and involuntary, or as *chronic* and *premeditated*. This view distinguishes between those cases of suicide which have been long meditated on, and those which have been prompted by some sudden impulse. In the first kind, the act may be induced from some strong passion either indulged or suppressed, which had insidiously affected the organization of the brain; or the desire may be long fostered, from some undefined impression that the death of the party will be of some advantage to the family, or to their faith, and so forth; whilst the latter may act from a temporary depression, either from some real or imaginary suffering, and decide suddenly and promptly to destroy himself, as a lesser evil than the one he seems to experience. It is, therefore, of some importance to endeavour to understand how, under any circumstance, a man can so "hate" himself, and pervert a *strong law* of his organism, unless that the change of his nature, which had so perverted his judgment, is admitted to be the result of some morbid process. Had he been in a perfectly healthy state of mind, he would have had clearer perceptions of his duty, and better judgment under any especial exigency, instead of the distorted consciousness which made him assume a right to take away his own life.

In suicides, therefore, we may remark, that it is with them as it is with those who are pronounced insane,—that their opinions would deserve attention, if their premises were realities. But as much of what they state is merely assumed, or, if based on distorted notions of things, is highly exaggerated, so their inferences are as a consequence illogical, rendering it manifest that there exists some functional disturbance of the feelings or moral sentiments; and thus the suicide, like the insane, may also have some organic lesion of the brain, which tends to induce in both cases some form of mental derangement.

Sometimes the two conditions co-exist in one and the same individual, when, for instance, after suffering for years from "a mind diseased," the patient will suddenly destroy himself, from his painful monotonous existence; or when labouring under

* We knew a gentleman fond of horse-racing, who stimulated to great excess without appearing to suffer much permanent consequences, and, as he was a prosperous man, he seemed to be an exception; yet on one occasion, having lost many thousands at a St. Leger, at Doncaster, he left afterwards, and that same night destroyed himself. The long course of inebriation had affected the brain, and under the first strong shock the balance of power was lost, and he acted as a madman!

religious mania, haunted by the notion that he has a call from his world by the agency of some supernatural influence.

Other instances of the proximity, if not identity, of suicide and insanity might be given, when life is voluntarily sacrificed from a conviction that the mind is in an incurable state of disease; and in those cases, when the lunatic has been cured, and is haunted by the dread of a probable relapse, and under this painful impression puts an end to his existence, and also in long-standing cases of melancholy, there is often manifested a strong determination to destroy themselves.

Whatever may interfere with the actual healthy condition of the mental faculties, whether the cause is idiopathic or sympathetic, may induce either insanity or suicide. Under such conditions of mind, the mental vision becomes indistinct and gloomy, and, like children in the dark, they conjure up frightful images, and are startled at their own creations, when sometimes the shock to the nervous system may end in insanity; or, to get rid of such morbid impressions, they commit self-murder, their mode of effecting this act of desperation being influenced by some means which, in ordinary parlance, are accidentally presented to them when they have decided on the act!

We will cite a few instances in illustration of the previous statement.

A. B., a Wesleyan, had been in a state of mental depression for some time, arising, it was said, from some religious misgiving as to his spiritual state; but still he attended to his business. On the morning on which he destroyed himself, he had been to chapel, when something in the sermon he applied to himself, and was more than usually taciturn as he returned home with his wife and family, but still not sufficiently so to excite either alarm or suspicion. He said that he wanted to go into the shop to get a tract he had left there, when it is supposed that, seeing a large knife which he had used in his business, this suggested his determination. He went up into his bed-room, carrying the fatal weapon with him. There he carefully placed his Sunday coat and waistcoat on a chair, and then nearly severed his head from his body.

A parish clerk of C——, who had in a comparatively short time lost his wife and family from typhus fever. He became melancholy from this sad visitation, and attributed it to his own awful habits of inebriation. But instead of becoming a better man, he continued to drink to excess; and although his star (who acted as his housekeeper) was warned not to leave any weapon in his way, and which she prudently attended to by taking away his razors, and every article of dress which might have been used for strangulation, yet one morning, as he had not

made his appearance at the usual hour, his bed-room was empty, and he was found drowned, having suffocated him with a chamber utensil.

A pensioner at B—— became melancholy from the incontinence of his wife. One day, after he had been with a horse-pistol, he loaded it. His wife came into the room afterwards, when he charged her with his morbid suspicion, upbraided him, and told him if he were not drunk he would have dared to say anything so insulting to her; and she then leaving him, that he was a most contemptible coward. There was a feeling of remorse for making such a charge—there was no proof—or the word *coward* grated on his ear, and he regarded it as a taunt for bearing his supposed cowardly tamely, it is impossible to say; but the pistol, already loaded, was near him. This he seized on, placed it in his hand, fired, shattering his skull, and dashing his brains up to the ceiling!

There are many other conditions of mind, besides the above noticed, which induce self-destruction; and none more common than that restless state designated "*tedium vite*," when the mind seems incapable of being healthily occupied. There is then experienced a desire to leap the gulph which separates the living from the dead. When such a condition of wasted energy exists, the irritable and strong nervous irritation must be regarded as a diseased condition of the mental faculties; for, as it is a conservative law to preserve the normal functions of the body, so that they should be exercised, it is equally so in the mind—lassitude and diseases are superinduced when the mind's salutary conditions are neglected.

We have many well-marked instances of persons with great wealth, who had been pampered from their infancy, and allowed to take their own course as to their mental education, when soon the injudiciousness of this treatment has been manifested in the waywardness and fickleness of the individuals, and a feverish desire for change, which have brought neither pleasure nor satisfaction; and having had neither object nor purpose in their existence, they have, under a temporary loathing of themselves, in the same wanton and purposeless manner as a spoiled child will suddenly break a toy he has been indulged to possess.

Persons of this class, which belong to the acute or impulsive form of suicide, according to M. Esquirol, present many varieties. There may also be included in this division those who are seized with sudden remorse, often, when in a maudlin state of mind, they commit self-murder; and those who, under a sickly consciousness of the moral sense, after suffering from a debauched career,

recourse to the same quietus. Others will destroy themselves when offended by some insulting phrase by a superior, or when treated with contumely by an equal. Yet this very sensitiveness is the sign of positive functional disease. Women who have been seduced, and afterwards treated with scorn and insult by the heartless wretches who have accomplished their ruin, will, under the twofold effect of pained affection and remorse, destroy themselves. So also will timid and excellent men who dread any threat of criminal proceedings, even when they are guiltless. All these different victims of a state of mind which resembles, if it is not actual insanity, may suddenly, in a moment of terror, remorse, or any other outraged feeling, precipitate themselves into a river, or cut their throats, quaff poison, hang themselves, and so forth, merely to rid themselves of the irksomeness and irritation under which they suffer. As a general rule, their intellectual faculties possess neither power nor intensity; but there are, on the other hand, too many exceptions of philanthropists and able jurisconsults who have put an end to their existence, although, if such men had had healthy minds, they would have endured their allotted trials.

There is another phase in the acute form worthy of a passing notice. We allude to those who have exercised their minds with great activity for many years, and when they have obtained the *otium*, will seek for the *dignitate* in some arcadia, where, amidst plenty, they expect to realize their long-wished-for rural happiness, and a calm and quiet existence—this state had formed the staple thought of their waking dreams, whenever there was a lull in their previous laborious occupations. But, alas! torpor is the symbol of death, as activity is that of life; and so they find their long-cherished hopes a mere phantom, an "*ignis fatuus*," and they soon tire of their meretricious splendour. The very quietude renders their listless lives so much more monotonous, until it becomes too irksome for endurance, and then, under a sudden impulse, they either destroy themselves, or become melancholy and hypochondriacal. Numbers, therefore, have finished a life of constant industry in the asylum, or by their own hands. And by their death they have bequeathed an admonitory lesson to avoid either excessive mental labour, or so little that inanition results, and destroys, in either case, the harmony of the mind.

In all *chronic* cases of suicide there is evidence of a gradual perversion of judgment, and with so much disturbance of some of the feelings or sentiments as to render it a matter of legal induction, that if not insanity, it so resembles it that it must be regarded as a phase of mental disease. In many instances it may be difficult to trace the actual predisposing cause, when the fatal act has occurred; yet, if the manners and conversation of such

piqued that her paramour had forsaken her, and that her mental disease arose from the chagrin of offended vanity, and some remorse that she had sinned against the man who had treated her so generously, and with so much consideration. Instead of rallying, her mental sickness assumed a more chronic form; and one day our quiet and respectable neighbourhood was startled by the report that "Mrs. B—— had cut her own throat!" Knowing her medical man, some of our family inquired as to the correctness of this statement, and he confirmed its literal truth. The wound was not mortal, but she was weak from loss of blood, yet it was thought she would recover; but a nurse was placed to watch, lest she should attempt to tear open the wound. After a few weeks we saw her, pale yet beautiful, and with such a melancholy expression as would have rendered her a charming model for a Magdalen. Months passed away, and she seemed, if not happy, yet reconciled to life. She renewed her pastimes, and occasionally saw company. Yet when it was supposed that she had recovered her mental health, we heard that she had hung herself! The servant, who found her suspended, cut her down and sent for a medical man. She was again restored to life, when she expressed her deep regret that she had been guilty of such an act.

Her remorse must have been the result of some real or imaginary cause; for about six weeks after the latter circumstance, she went out one morning very early, dressed in a riding-habit, but on returning to breakfast, a hue-and-cry was raised, and after a search of some hours, she was discovered drowned in a mill-race. Though dead, she looked beautiful. Her long brown tresses, though closed, and her rich profusion of the same coloured hair, contrasted well with her dark-green habit, and gave her the appearance of one in a calm sleep; but in her hands there was grass, which she must have seized from the bank, as if there had been some sudden return of healthy consciousness, and a desire to prevent the death she had so perseveringly sought. The latter may have resulted from the sudden plunge into the cold water, and the tonic effect it temporarily produced on her system; but she was too much entangled by her dress to save herself, and the current was so strong that she had drifted a long way from the place where her hat lay. The verdict of the jury was "Temporary insanity."

In this case, however imperfectly sketched, there is sufficient ground to trace the predisposing causes of her morbid condition. A woman who had yielded to her prepossession in favour of a man in an inferior grade, would have both her affection and vanity wounded if he proved worthless and untrustworthy. In Mrs. B——'s case, she had been neglected by the very man to whom

she had sacrificed honour and conjugal duties; and there was, besides, "the still small voice" that taunted that she had sinned too deeply even for repentance, as she could not now compensate for the injury she had done to her excellent husband; and young and beautiful though she continued, her remorse was so great that she loathed her existence! Yet no one would affirm, if this history of the causes which induced her mental condition is correct, that she was sane when she persisted in the fixed idea of destroying herself. The evidence submitted is important, as showing how the balance may be disturbed in a sensitive mind, when the moral sense becomes morbidly affected; and we have some clue to explain the whole change in her mental constitution, and the derangement which subsequently supervened—a derangement which tended to subvert the instinctive love of life, and to induce a constant desire for its annihilation. We might say, that *even* when a verdict of "Not proven" is substituted, so far as the *actual* guilt of such a being,—yet the whole history of the case, and the catastrophe, renders it a matter of presumptive proof that there was some painful state of the moral sentiments, which had quite metamorphosed one fitted for healthy enjoyment to seek for death in the midst of more means of happiness than she could ever have anticipated.

We will now give a case, when a similar result ensued, not from any moral delinquency, but from a threat to prefer a charge which would fix a stigma on one whose character was unblemished. We quote the facts from the narrative portion of a lecture delivered by E. P. Hurlbut, Esq., before the Mechanics' Institution of New York, "On the Legal Protection of the Sentiments and Feelings." After many apposite and sound views having reference to his especial subject, the lecturer said:—

"Many of you, doubtless, remember a case of suicide by a young gentleman in this city, some two years ago, who rushed to the top of his house, which was three stories high, and precipitated himself thence upon the pavement below, thus occasioning his awful and instantaneous death. A few weeks before this melancholy event he was in perfect health, mingling with fellow-citizens, having their highest respect, and the attachment of many warm and devoted friends. His domestic character was a model of the most affectionate kindness and perfect devotion to the happiness of his mother (his only surviving parent) and his brothers and sisters. His charities were liberal; no worthy applicant for aid went away empty from his door. He was generous to a fault. His integrity was of the highest order, and he preserved the most unsullied honour; it was his soul—his life. In fine, he was one of the noblest young men I had ever known, and one whose memory I shall always cherish to the latest hour of my life. I would it were divested of the story of his unhappy fate!

"A few days before his melancholy death he called upon me, under

great excitement of mind, and stated to me, more as a friend than as his professional adviser, the details of a conspiracy formed by several abandoned people in this city to extort money from him, one of whom had sought his acquaintance to ask charity, and who had received pecuniary relief at his hands. The conspirators had a scurrilous paper in their interest, and a threat of a libellous publication had been made in its columns. This was his concern at the time of his visit to me. I inquired into the whole matter with great interest and anxiety. I know the truth of his case, and I know to a moral certainty that there was not a shadow of a just foundation for the least censure on his fair fame. I advised his treating the conspirators with utter contempt, and to pay them not the least attention. He soon after received from some lawyer, who read the laws but to violate their spirit, and whose moral nature was attuned to the work of mischief, further intimation that the conspiracy was to be further consummated by a suit at law. He brooded over the matter till sleep and rest forsook him. The scurrilous print came out with its brutal libel, and its victim fell beneath the stroke.

"When he next called upon me, which was the day after publication, *I think his whole appearance was that of a maniac; and his wild exclamations, his intense mental suffering, amounting to the most dreadful agony, baffled description.* Alas! I could not soothe his wounded spirit; he was taken to his home, and when inquired after the next opportunity, I learned his death. This man was murdered, and the murderers live unmolested by the law."

The lines marked in *italics* are ours; and we have not any hesitation to say, that had this excellent young man, whose moral susceptibilities were so fearfully deranged by a foul libel, consulted a physician instead of his legal adviser (though an estimable and intelligent man), some means would have been suggested, and the horrid catastrophe might have been prevented.

Cases of the acute form of suicide, as M. Esquirol would have designated the one given by Mr. Hurlbut, are rare in comparison with those which assume a more chronic form; and yet such acute and sudden development of the suicidal tendency furnishes the clearest psychological evidence of functional disturbance of the mental constitution, indicated by defective ratiocination and a derangement of all the moral perceptions. Like in monomaniacs, they have the one idea which haunts their imagination, and death to them is the only means of exorcising it. In our experience we have remarked that such persons are of a highly sensitive organization, the intensity of which is greatly increased by their nervous or bilious temperament. Examples have been already given that the predisposing causes may be sudden pecuniary embarrassment, real or fancied jealousy, or the dread of infamy, and so forth, and which, by arousing into fearful activity some of the affective faculties, destroy the mental harmony, and then in a moment of desperation life is sacrificed. In Mr. Hurlbut's case, a man

of pure mind and life was so disturbed by threats which he supposed would, though innocent, still stamp him with ignominy, that his existence became to him intolerable. Even in such acute forms, when the suicidal act is perpetrated, there is unmistakable evidence of positive insanity. Such disturbing influences might occur to individuals of merely a lymphatic temperament, although the process would be more tardy, but ultimately similar consequences might result. An individual of this kind would brood over the source of his irritation, and gradually affect the healthy action of the brain, and then his life's drama might suddenly terminate in an act of apparent deliberate self-destruction.

In both the acute and chronic forms of suicide, the mind is clearly in an unsound state—an opinion which has already been advocated in this and other journals. The cases of suicide which have been regarded as exceptional, are those wherein the act has been committed with apparent deliberation, and with a coolness worthy of right and praiseworthy objects: such as when life has been voluntarily sacrificed under the impression of an incurable disease, and a deliberate determination to avoid a continuation of the suffering experienced. But persons who have committed suicide under such circumstances, have reasoned contrary to all sound data, and in violation of the strong instinctive feeling of self-preservation. It is true that they may have had their perceptions sympathetically perverted by the fixed sensation of fear with which they are impressed, and would not be regarded as actually sane by the competent physician who had studied the effects of suffering on the vital organs, and the disturbing influence of continued pain on the organs of thought and feeling. So, also, although there are cases on record when persons under pecuniary difficulties have destroyed themselves, apparently with great coolness and deliberation, yet this should not be regarded as any proof of their sanity, inasmuch as all who are in embarrassed circumstances do not destroy themselves. Hence the inference must be, that when they do so they act insanely, being predisposed, from some defect of their organization or education, to distinguish what are the legitimate acts of a man's volition, and what are interdicted in the very constitution of the mind in its relation to the Divine Author.

The following case, which induced a jury to pronounce a verdict of *felo-de-se*—as, in their judgment, the voluntary death was the act of a sane man—is cited to show that even the evidence on which that opinion was founded, furnished indubitable testimony to the contrary. We are forced to quote from memory, having mislaid the newspaper (published at Chelmsford) containing the report:—

“Some years since, a gentleman of the name of D— arrived at Saffron

Waldon, in Essex, in a post-chaise, from Dunmow, and drove up to the principal inn. He was by profession a surgeon-dentist.

"The morning after his arrival he called on some of the medical men, who, finding him a man of cultivated mind, and with a respectable knowledge of his pursuit, promised him their support. He intimated his intention to deliver a lecture at the Town-hall, 'On the Natural History of the Teeth.' He therefore issued a circular intimating the evening on which it would be given, and, at the same time, announcing that he might be consulted daily.

"Some of the medical men who attended his lecture were still more satisfied with his qualifications, and pleased with his polite and urbane manners. He is represented as a man with an intelligent expression, dark eyes and hair, a blond colour, with an aquiline nose and good mouth, and that he made a favourable impression on his auditory.

"He gave little trouble at the inn, and was rather abstemious in his habits. On the Saturday, just a week after his arrival, he was observed to be very moody; but still this did not produce any unfavourable impression, much less any suspicion as to the actual condition of his mind. On the contrary, it was attributed to his ill-success, as he had had but one professional visit.

"The next morning, as he did not make his appearance for his breakfast, some misgiving was felt, and the waiter went to see if he were indisposed. As he received no answer when he knocked, he tried the door, and found it locked. A forcible entrance was made, and the poor fellow was found dead on the floor, lying in a pool of blood, as he had actually severed the carotids with a razor!

"It was then remembered that he had been heard pacing about his room for some time after he retired, during which he had taken the precaution to destroy every scrap of paper, and to cut out the marks in his linen, as if to prevent all clue to his personal identity. And he had also addressed a letter to the jury, prior to the performance of his last fatal act. This document commenced by stating that he had long striven with misfortune, and his whole life had been a series of important struggles; that his ill-success arose from no fault of his own, so that he had no other alternative but death. He then went on to say, that some would deem his act as extreme cowardice; and others, that was one of daring presumption to his God; that this latter was a mere personal matter between himself and his Maker, and that he believed that the Great Author judged of motives, and that he did not doubt of being pardoned. Then he continued thus: 'This act of mine is clearly an act of self-murder, and the verdict must be *felo-de-se*.' Finally, he spoke of his obligations,—that he had paid up his account the previous day; and he requested that his instruments might be sold to liquidate the remaining debt, and the surplus to be given to his servants, to whom he had not given any gratuity, &c.

"The jury brought in the verdict he had pronounced on himself. He was buried on the cross-roads near the town, and a stake driven through his body."

In this brief view there is furnished evidence of unsound-

ness of mind ; for with his previous experience of the tardiness of professional application, and with the evidence of his positive integrity, it might have been supposed that he would have avoided the expense of travelling post, and sojourning at an inn ; and that if he had been actually sane, that he would have economized his means by taking some reasonable apartments, and thus been enabled to await with some little patience the chance of replenishing his almost exhausted exchequer. So much for the facts which ultimately induced him to commit suicide. But there are other moral aspects which may be worth noting. He seemed to lack moral courage, or any firm reliance on Providence, otherwise he would have struggled on even had his prospects been still more gloomy.

The jury considered that his letter furnished strong evidence of self-felony, induced by a deliberate criminal intention against his own person ; and that his justification, though erroneous, was a proof of his sanity. For our part, we should decide the contrary by the presumptuous and contumacious manner in which he justified his act. Had he been sane, he could not have spoken with such flippancy of the Majesty of Heaven. It may be said that if this constitutes a proof, then all inveterately sceptical persons should be regarded as lunatics. If they are not so in the eye of the law, they certainly indicate proofs of a want of harmony of the mental faculties ; and we must decide in the case of D——, that he indicated some defective conditions of the religious perceptions, either from some defectiveness in his mental constitution, or by some warping from defective culture. The inference we have drawn as to his actual abnormal state of mind is capable of some further presumptive proof, if we investigate what strong motive might have influenced him in urging a verdict of *felo-de-se*.

We may mention, incidentally, that a gentleman at Saffron Waldon told us "that D—— had a fine Oriental physiognomy, and that he felt assured that he had been born an Israelite." This fact would explain the difficulty, that amidst the distraction and want of confidence resulting from his scepticism on spiritual subjects, there seemed to lurk the prejudice of his people, that if he could not be buried "in the cave of Machpelah," where his ancestors lay, that he would prefer unconsecrated ground rather than lay in the consecrated ground of any other form of religious belief. Now, whether the suicidal act had been the result of long deliberation, or from a sudden impulse, the insanity is obvious from the incoherence of the reason for the act, and that his very conclusions had simply resulted from his incapacity of perceiving the erroneous data of his premises—so that the inferences which had induced the deed itself were absolutely unsound, and posi-

tively absurd. If this victim had been actually sane, his crime would be greatly aggravated; for in committing the sin he had seemed reckless of consequences, and had added to his ill-deed the great offence of using insulting language to Him whose law he had determined to violate. We, however, cannot hesitate to decide that his conduct marked one of decidedly unsound mind. This induction is founded on positive data, particularly if we reflect on the predisposing causes of suicide, which are found to be precisely similar to those which induce some of the forms of insanity, so that it would seem in all cases that it is difficult to draw the line of demarcation. In both there is evidence of some disease of the mental faculties.

If we were to indicate any particular form of the affection by which to specify the perfect analogy between suicidal cases and insanity, we would instance certain states of the domestic feelings induced by some sudden and strong emotion which tends to make persons so powerfully deranged, that for a time they will "play such fantastic tricks before high heaven" as to give evidence of some morbid aberration of mind, which might be of temporary duration if medical aid had been procured, but which assumes a permanent form of disease if neglected, and then it might end in fits of despair, revenge, murder, or suicide. Nay, there are instances of both crimes being perpetrated at one and the same time.

The following case will illustrate the latter statement:—One night, during our visit at H——, we heard a report that Mr. —— had murdered his wife, set fire to his house, and then killed himself. We went with some gentlemen to visit the tragic scene. The premises had been fired at different places, in an apparently deliberate manner. In the bed-room, in which lay the murderer and suicide, we found the bed-curtains burnt to tinder, presenting a crape-like mourning where the innocent victim lay, through whose head a pistol-ball had penetrated the brain. She was lying in a pool of blood, whilst the corpse of her husband was stretched on the carpet, cold and stiff, with a pistol close to his temple!

The circumstance itself excited great commiseration for the murdered lady, as her death seemed to have been the result of previous deliberation. This was confirmed by the evidence at the coroner's inquest. It was proved that on the previous Saturday the suicide had sent two poisoned loaves to his sons, who were at a boarding-school; but, in consequence of the tragedy taking place so soon, information was forwarded to prevent their being eaten. It was also stated by one of the servants, that, on hearing the pistol fired in her mistress's bedroom, she took a light to ascertain what was the matter; that

she spoke to her mistress, but did not receive any answer; and that then she beheld the curtains in a blaze. In the midst of her terror, and at the hazard of burning herself, she took means to ascertain if her mistress was there; and just as she obtained proof of the fact, and began to make an alarm, her master rushed in like a fury. She fled, and he fired at her, but missed; and she had scarcely regained her own room, when she heard another report, and a heavy fall. All the servants screamed, and rushed to the street; their screams, and the appearance of fire, brought immediate assistance, when the latter was put out, and the horrid affair was then revealed. The whole town was in a state of excitement, and every one marvelled what could have been the cause for such a series of unnatural and savage acts.

Mr. — was reputed to be a rich merchant; was a professor of religion; and lived, to all appearance, on terms of affection with his wife and family—so much so, that it was observed that, when he went for a morning walk, or to church, some of his children usually accompanied him. Besides, he was a man of gentlemanly bearing, seemingly kind in his manners, and generally punctual in his engagements. But, on investigation, it was discovered that his affairs were embarrassed; he had two establishments to keep, and two families to clothe and feed; for it appeared he had had a paramour with whom he cohabited, either before or soon after his marriage. To understand, therefore, the probable condition of his mind prior to the final catastrophe, we must reflect that he was not like a common, vulgar, uneducated man; he was well versed in his relative duties to his family, to society, and to his God; and he could not blink the sinfulness of his career, and the despicable acts he had to commit in order to conceal his immoral conduct;—then, again, his affairs had become so involved, that he could not continue to ward off the infamy of his conduct. These things, conjointly, must have fretted him greatly, and affected his moral sense, whose “still small voice” must have continually tortured him, and denounced his follies and his crimes,—and thus he was ultimately driven mad. For one of the strongest collateral evidences of his insanity is manifested by the fact that, whilst he endeavoured to destroy his legitimate children and his wife (a most charming woman), he did not try to injure those who, in the eye of the law and in the judgment of society, had not similar claims on him.

Who could pronounce Mr. — to be sane? He had placed tallow candles in different cupboards, which he set fire to just about the time he had intended to shoot his wife and himself, under the unsound assumption that his whole residence would be burned to the ground, and that then no evidence would exist to implicate him, or to explain the origin of the horrid affair. If

had been in a healthy state when he concocted his scheme, he would have been certain of exposure and in- would have thought, that if the servants smelt fire, or the re visible,—and if to these be added the report of pistols, have calculated that alarm would be given, and that, as l consequence, the double murder would be discovered, an exposure would be made of his immoral duplicity, desperate condition of his pecuniary affairs.

we deemed it right to mention these facts, as, by their e can trace all the incidents which predisposed the state ental faculties, and induced the fearful tragedy we have

His duplicity caused too much strain and tension on t, and could only tend to mental derangement. He used the counting-house, and return to dine with his family; h of the time which should have been spent in business ted to his immoral purposes. Can it then be wondered e was in a constant state of irritation? And he must d an incessant struggle how to rid himself of his moral ce, and to relieve himself of his pecuniary liabilities, until his own preservation became the all-absorbing subject ind. This constant painful excitement made him dwell means of avoiding certain infamy; this *one* thought d his whole attention; and it at length manifested so tensity, that his judgment lost its influence, and his mse became so depraved, that it could no longer exert raining influence over his conduct. And when the of power was thus lost, the selfish idea then suggested t alternative—infamy or annihilation! In the arrange- e made, he showed an absence of all common sense—a addled state of brain, which defeated his own tortuous and thwarted the intention of the result of his desperate if he had not been a slave or a coward,—made so by his desire to prevent the public disgrace that awaited him, ny exposition of his conduct take place,—he would not tempted to kill his own offspring with poison, murdered , attempted the life of a servant, set fire to his house, and, le, destroyed himself.

is one practical lesson derived from this melancholy and tory—namely, that when any of the feelings obtain such influence, there cannot be any sane perception, and self- is then more or less defective; and then the intensity of sh propensities increases inversely, in proportion as the entiments become torpid,—the latter lose all influence e actions, whilst reason is too feeble to whisper a protest restrain or save the victim of passion, even when the iminal actions are contemplated. In the case of Mr. —,

there was a feverish condition of mind; he either had not time else he could not deliberate on the consequences; and though he was the victim of disease, hurried onwards to the frightful without one thought of the actual danger until he had perpetrated the first deed of violence, and was then driven irresistibly on, and in a reckless and desperate mood consummated the act of madness.

We think it not improbable that many domestic tragedies result of some moral compromise in the first instance, and always from any strong natural criminal tendency. What therefore, tends to affect the mind's harmony, is fatal to its health. It matters not what the disturbing influence may be,—if it disturbs the whole thinking process, then it is certain to induce some form of mental alienation. Whatever, then, may become an idea, assumes a palpability, having all the vividness of an actual picture, which so impresses the mental vision, that every thought is rendered confused and indistinct, until a sense is experienced that the only way of getting rid of the phantasm is self-murder. We think, in Mr. ——'s case, the verdict of the jury was "Temporary insanity;" and they were right in saying so, particularly as it was remembered that for some weeks before the occurrence there was observed some alteration in his manner. He was more irritable, and less attentive to his toilet; he drank more wine, was more abstracted and taciturn, and betrayed more impatience than was his wont. If these symptoms had been regarded as indicating some abnormal condition of the mental faculties, the miserable result might have been prevented.

In cases where there has not existed any criminal predisposition to account for these forms of mental derangement, yet the same similar results may be induced by an over-sensitive condition of the nervous system, often from extreme anxiety arising from great pecuniary difficulties. We could cite some interesting illustrations, where a chronic form of disease has disturbed the mind's sanity. The various agencies may act insidiously, but there is some positive injury to the organization of the brain. Other important vital organs may be implicated, which, acting on the seat of thought and feeling, aggravate the derangement in the ratio of their disturbing influence. Dr. Mantoux says that—

"During the last twenty-five years many cases of suicide have come under my notice, in which the mental hallucination which led to destruction had depended on lesions of the brain, occasioned by long or neglected injuries of the head, to which neither the patient nor his friends attached any importance. In several instances of self-destruction without any assignable moral cause, and in which no signs of fatuity or insanity were manifested, I have found, on

when examination, either circumscribed induration, or softening of the brain, or thickness and adhesions of some portions. The conviction was therefore forced on my mind, that very many of the so-called nervous or hypochondriacal affections, which are generally considered imaginary, and dependent on mental emotions, are ascribable to physical causes, and frequently originate from slight lesions of the brain."

The effect of cold and hunger may induce insanity and suicide, and which fact is vividly described by Baron Larrey as occurring at the retreat of the French army after the burning of Moscow. We also know that great misfortunes or deep humiliation to the proud and sensitive when they become the recipients of alms, at this degradation will so affect them, that the whole chylotic viscera become disturbed in their functions, and in their turn aggravate the morbid condition of the mental faculties. Thus some painful emotions may so affect the liver, and a state may be induced of morbid depression, and which may for a time exist with symptoms of self-destruction, and yet if cured before the brain is organically affected, the symptoms also cease, and a healthy instinctive self-preservation supersedes the previously sinful condition. On the contrary, if the hypochondriac is neglected, under the erroneous impression that the complaint was of temper, then the mental depression which was in the first instance an effect, becomes a cause, and the suicidal disposition, which had only been a symptom, assumes the more chronic form, and may be persevered in until the act of self-destruction is accomplished.

The latter cases are well distinguished from those sudden manifestations under a temporary irritation of temper, or the losses of spirits after a debauch, or a quarrel with a lover, and so forth, when often such persons talk of destroying themselves. In the majority of such cases the threat is never seriously entertained. But should these persons, under the impulse of irritation, carry a threat into effect, if the patients are promptly saved, a reaction takes place, and they never repeat the folly or the crime of the attempt; and generally the cure is so effective that not any further endeavour is made to abridge life. These, however, can never be confounded with patients where there exists a strong tendency to self-destruction, and which, from the intensity of the desire, must be regarded as a state of actual disease; such a case as that of Mrs. B——, who hung herself, then cut her throat, and finally drowned herself. For such beings the suggestions of Dr. W. A. Brown, "for an asylum for patients recovered after an attempt at suicide," would be highly important, and cures might be made even such chronic cases, unless there existed extensive lesions either of the brain or its membranes. The following extract from the article is worthy of attention:—

"No one can read the public papers from barren curiosity, or catch the moral characteristics of the time, and shut out a conviction of the frightful increase of suicide meditated and effected." And he regrets "that the frequency of such events, and the publicity given to them, often impart to the suicidal disposition an epidemic or imitative character. We may daily observe it stated in the public papers, that persons who have been prevented from the commission of suicide, are immediately, on their recovery from the effects of the attempt, set at liberty, and allowed to return to their friends and home. This is very questionable humanity. It is, in effect, to deliver unfortunate beings, a prey to their shame, or sorrow, or madness, to the very motives of the act they meditated, and will still meditate, and to those aggravated by exposure and obloquy. Individuals, under such circumstances, cannot be regarded as responsible, or expected to understand so clearly in which they have been, and are, as to resume at once those modes of thinking and feeling on which dependence can be placed, and in which the safety of the miserable beings consists. Assuredly they are neither trustworthy nor rational, and yet it is doubtful whether they can be treated as insane. The law forbids that they should be confined and protected from themselves in an asylum, however appropriate such a retreat may appear for their condition, and however closely connected that condition, when analysed, may be found to be with mental derangement."*

That it should have ever been doubted that there are many symptoms in common between mental derangement and suicide is indeed a matter of surprise. Place all the phenomena of both these forms in juxtaposition, and it is impossible to distinguish the difference of a person with one fixed idea—that of his own self-murder, and the different hallucinations which are actual existences to the mental perceptions of the insane; and that it should be deemed right in the latter cases to protect the individuals from injuring themselves, and to abandon suicides to caprice or accident; circumstances so similar, yet treated so differently, demonstrate the defectiveness of the state of the laws, arising from the fact that the distinctions between insanity and suicide are made rather from the popular views of these different affections, than from the more certain *data* of the physiological and psychological sciences. No one cognisant with medical physics could possibly say that when there exists a fixed determination for self-destruction, that it is not a sign of mental disease, because the very premeditation is opposed to the instinct of the *normal* mind. But we have the testimony of many practical and learned physicians who have given special attention to the subject, and we find that their experience confirms the *a priori* reasoning—that in suicides long meditated there is found, on a post-mortem examination, some organic lesions of the brain, or some altera-

* "Lancet."

tion of its structure; and that when no such signs are indicated, that then the membranes of the brain, or the skull, show some proof of diseased conditions. By the evidence, therefore, of these most qualified witnesses, there is confirmed, what might otherwise appear merely speculative inferences on the predisposing causes of both these kinds of mental affections. When, however, in the positively insane and the determined suicide the brain, &c., does not appear to be implicated, that is, so far as our experience can detect, then in both instances it will be found that some of the organs of vegetative or animal life are in a diseased condition, and by reflex nervous action affect the organ of thought, and induce symptoms of such mental derangement, just as if the mental organs themselves were idiopathically affected.

We have alluded, incidentally, in the extract from Dr. Brown's paper, to the epidemical form of the suicidal malady, but which is a subject in itself so very important, as to demand not a mere passing notice, but an elaborate investigation from more careful statistical tables than now exist. These tables should be collected from well-marked cases of this kind in counties, districts, and countries, in which certain special difference should be noted, not only when they are epidemical, but also when they are endemical.

If it is admitted that there is such intimate connexion between particular conditions of the body and the states of the mental faculties, it is not surprising that, in a low marshy district, for example, where the *malaria* induces low forms of fevers, that in its incipient stage, if one so circumstanced commits suicide, that others suffering from precisely similar depressing sensations, should adopt a similar mode of making their quietus. Having thus alluded to an epidemical fever as liable to induce epidemical suicide, and that this sort of imitation arises from a similar condition of the bodily and mental faculties; we would now also call attention to the fact, that a *special* moral state of a people may exist, which may render them disposed to listen to any suggestion, even as to the best method of how to kill themselves.

About the year 1818 there was published a *brochure* in Paris, recommending ignited charcoal as an easy and agreeable mode of dying. A programme was given of all the details to be attended to, and a lively description of the *modus operandi*, when death was described as advancing in a noiseless way, without either startling the conscience or the consciousness, and that a gentle drowsiness covered the senses, and continued to increase, until the world, and its joys and its sorrows, were oblivious!

The following year, we learn that out of two or three hundred suicides in Paris, one-fifth of these cases had died from ignited charcoal. The imitation in this instance arose from a mental

idiosyncrasy, a quasi-philosophical indifference of life, a state often induced by a conception that all the vital phenomena are the result of mere bodily organization, and that mind is merely the result of cerebration, or in other words, a secretion of the cerebrum.

With such opinions men may seem to commit suicide in what, in ordinary parlance, might be called health; but as the condition we have named is in violation of all the teachings of theology, and at variance with the experience of mankind in general; it would seem that the intellectual and moral defect, inferred from the incapacity to appreciate the most ennobling truth, "man's immortality," would be presumptive evidence, if not of positive insanity, according to any acknowledged legal definition, yet of that kind of defectiveness of some of the mental faculties by which scepticism is induced as one of its consequent hallucinations.

We have noticed, in this country, that when some special mode of self-destruction has occurred,—as, for example, taking prussic acid,—that this has become, for a time, the prevailing method of suicide. And lately, we have observed so many cases of throat-cutting, that it seems almost epidemical; and yet there has not, probably, been any acquaintance between any of these infatuated beings. Among the unfortunate, dissolute, and criminal-minded among the gentler sex, the mode of seeking a *quietus* from the ills of life is by drowning themselves.

Although statistical tables have some relative value in an investigation of the subject under consideration, yet they are defective in furnishing *data* as to the causes which induce the chronic or acute forms of suicide. The latter knowledge can only be acquired by an examination into all the antecedents of each case; and then the medical psychologist would obtain positive information both how to prevent or cure these forms of disease, so as to enlighten the public on the subject.

Statistics of suicide are, however, important to indicate what are the particular effects of occupation, of climate, habits of life, age, sex, and so forth. They are also important as correcting much misunderstanding as to the periods of the year that suicide is most prevalent, and the countries in which it is most common. Thus, for example, the names of the following countries are placed in the order of their respective number of suicides to the population—namely, "the United States, England, Prussia, France, Austria, Russia, Italy, and Spain."

The following statistical facts concerning suicide are extracted from page 74 of the Third Report of the Registrar General:—

"This crime, it appears, is most prevalent in London, the proportion being 10·9 to 100,000 inhabitants; next to this discreditable pre-eminence stand the south-eastern counties bordering on the me-
re-

is, where it is 8·4 to 100,000 ; the range of other parts of England 1·8 to 7·4, which is the proportion of the western counties, whilst in Wales it is but 2·2. The proportion throughout England and Wales is 6·3, and the total number in the year was 2001."

The greatest number of suicides occurred in the spring and summer, when crimes attended with violence, and also attacks of insanity, are most common. Thus, in April, May, and June, there were 563 ; in July, August, and September, 539 ; in January, February, and March, 484 ; and in October, November, and December, 465.

Unfavourable climate cannot, *per se*, specially favour the development of the suicidal tendency. For the climate of Holland is similar to England, and probably even more foggy, and yet its proportion of suicides is less than any of the countries above-mentioned. There must, therefore, be some circumstances capable of modifying the effects of this supposed powerfully predisposing cause ; and it is some proof that such is the case, by the fact that the number of suicides in different countries vary considerably at different periods. The common opinion that there are more suicides in the dull months of the year, is refuted by more accurate information. For, on the contrary, it is now proved that a dry hot season fosters a disposition to suicide, and this, for the reason that a dry atmosphere has a tendency to produce feverish habit ; and, as a consequence, tends greatly to increase irritability and susceptibility of the nervous system. This latter view is founded on accurate observation. We cite the following additional evidence :—

"Of 1131 suicides committed at Berlin, Hamburg, Westminster, and Paris, there were, in January, February, and March, 237 ; in April, May, and June, 299 ; in July, August and September, 335 ; in October, November, and December, 260.

"A similar influence of the spring and summer weather as favouring disposition to suicide is proved by the statistics of M. Esquirol, at the Salpêtrière, and by those of M. Prevost, who found that of 113 suicides committed at Geneva in 10 years, the numbers in each month were as follows :—April, 19 ; June, 17 ; August, 17 ; July, 15 ; October, 14 ; May, 13 ; March, 10 ; November, 9 ; September, 6 ; January, February, 5 ; and December, 5."

The tendency to suicide seems to be least among persons whose occupations are out-door employments, and greatest among those of sedentary occupations, whose constitutions are necessarily less robust. The statistical facts which confirm these views are as follows :—

"That there is 1 in 9582 masons, carpenters, and butchers, who committed suicide in one year ; and 1 in 1669 tailors, shoemakers, and dress-makers. The tendency to suicide in those of active out-door occupations being 1 to 5·6 of those of more debilitating and depressing employments."

It may also be noted "that the tendency to suicide is more than twice as great among artisans than it is among labourers—being as 6 in 10,000 of the former, to 2·9 in the same number of the latter."

In the class designated by Mr. Rickman as miscellaneous, "capitalists, bankers, professional and educated persons, the proportion is 4·9 to 10,000."

Mr. Farr does not attribute any great value to the opinion of M. Roué, and other theoretical writers, "that suicide is most common where education is most diffused." Yet he admits that in England suicide is most frequent in the metropolis, the south-eastern, and south-western counties, where the greatest number can write, and is less frequent in Wales, where the proportion of persons who signed the marriage register with a mark is the greatest. He adds, however,—

"There is a general but no constant relation between the state of education thus tested and the commission of suicide. It may be admitted that there is some relation between the development of the intellect and self-destruction; but the connexion must be indirect and accidental. In opposition to the argument derived from agricultural districts and labourers in towns, there is the fact that suicide is more frequent among several classes of artisans than among the better educated people."

This latter view of the subject may be explained, partly as being the result of the excessive habit, among the working-classes alluded to, of taking various kinds of intoxicating beverages. The Registrar adds:—

"If the progress of civilization is to be charged with increase of suicide, we must, therefore, understand by it, the increase of tailors, shoemakers, the small trades, and to the incidental evil to which they are exposed, rather than the advancement of truth, science, literature, and the fine arts."

Subsequently, to show the difference between the influence of education, and the cases where a certain amount of education is occasionally associated, Mr. Farr mentions,

"That about 2·0 in 10,000 persons assured at the Equitable Society, and 7·8 in 10,000 dragoons and dragoon-guards, have been ascertained to commit suicide every year."

In the latter cases, we apprehend, the number is not to be attributed so much to defective education, as it is to their drunken and dissolute habits, to the non-exercise of the moral sentiments, and to the low and degraded condition, generally, of the mental faculties. We cannot attribute suicide to education; if we did so, we might as well say that persons would be likely to have the worst health who rigidly obeyed the laws of mastication, degis-

tion, and digestion ; and who, besides, would be sure to aggravate the symptoms by their attending to the laws of exercise and ablutions. Every reflecting man will, therefore, form a different inference as to the reason why there is a greater proneness in artisans to commit suicide than those who have out-door occupations, by attributing this difference rather to their breathing so many hours in a vitiated atmosphere, with a liability of vital disturbance from an obstruction of the perspirable exhalations, and other debilitating influences on the nervous system.

Mr. Farr seems to think that in trades least exposed to accidents "the mind is left unexcited by natural dangers, imagines and creates causes of death." But we repeat, that the morbid state which induces suicide in such cases is developed by the want of free air, genial temperatures suitable to the seasons, deficient muscular exercise, gloomy workshops, and uncomfortable homes, and the attempt to counteract these unhealthy and depressing conditions by the excessive use of alcoholic stimuli, until positive injury is induced to the brain and the nervous system. Then restless and irritable, they are rendered incapable of arousing themselves, or of entertaining cheerful trains of thought, and being haunted by the *spectra* of their abnormal minds, they seek relief from the irksomeness and irritation they endure in self-destruction.

In a very excellent article on "Suicide,"* the writer says:—

"It is not proved that education has, as many have asserted, a tendency to increase the number of suicides ; its influence in this respect not discernible. Neither does the state of poverty or wealth seem to have any material influence. But it is proved that among the inhabitants of large cities suicides are more frequent than in rural districts.

"M. Guerrey has shown, 'Statistique Morale de la France,' that the frequency of suicides in France regularly decreased as the distance from Paris increases. Similar observations were made by Prevost, from statistics at Geneva, and they are completely confirmed by observations made in this country.

"The tendency to suicide is much more frequent in men than in women. By the Westminster returns, in 25 years there were 478 males and 187 females who destroyed themselves: the proportion being as 78 to 27."

We have to notice similar proportions were observed at Geneva, by M. Prevost ; and M. Esquirol, comparing the result of several places, says, "the proportion may be stated as 3 males to 1 female."

Further details would be of little practical use, but the following proportion of the annual number of suicides in different

* "Penny Cyclopædia."

countries will furnish *data* for grave reflection, and confirm our previous statements, that the results will be found an exact ratio to the degree of departure from the laws of mind and body. M. Quetelet tells us, "that in Russia there is 1 suicide to every 49,182 inhabitants; that in Austria there is 1 in every 20,000; in France, 1 in 18,000; State of Pennsylvania, 1 in 15,875; Prussia, 1 in 14,404; City of Baltimore, 1 to 12,500; and New York, 1 to 7997 inhabitants."

These results would seem to affect the question of mental culture, for in Russia the people are generally ignorant and superstitious, which reduces them to a low intellectual condition; and that at New York, where they are not so, yet there are seven to one suicides in the latter. This would indeed be a gratuitous inference. For the high rate of suicide in the metropolis of the Northern States of America results in consequence of reckless trading, and to the sudden vicissitudes in the prospects and fortunes of such commercial gamblers. Suicide in all ages and countries has been perpetrated either by those whose moral aspirations were obtund, or else by those who reasoned (certainly on false premises) that when life ceased to be pleasurable, that we might get rid of it as we should avoid any other annoyance. And yet in the remotest times in which any opinions on suicide have been recorded, we find some sound views on the subject. We have already quoted the opinions of Cicero, and are tempted to give some few additional statements from the same author. Cicero, "Epis. ad Marium" (Epis. vii.), says, "When he had been defeated (when he laid down his arms under Pompey), there only remained for him to fall into the snare of the enemy, to choose exile, or suicide (*mors voluntaria*). But he added, "Cause why I should commit suicide there was *none*, why I should wish it, *much*." Cato destroyed himself at Utica in consequence of the victory of Cæsar in Africa.

Cicero "Tusculan Questiones" xxxiv., 1 and 3, says, "*A malis igitur mors abducit non à bonis.*" This argument was so ably advocated by Hegesias (a philosopher of Cyrene), that Ptolemy forbade him discoursing publicly on the subject, because many people after hearing him committed suicide. Callimichus has an epigram to Cleonbrotius, in consequence of Ambracia, a youth, who having read Plato "On the Immortality of the Soul," threw himself into the sea.*

The discrepant opinions of the ancients on the enormity of self-murder may be judged of by the laws which were enacted for its suppression. A rescript of Hadrian's expressly directed "That those soldiers who, either from impatience of pain or disgust of life, from disease, from madness, from dread of infamy or disgrace,

* Vide "Lact. in Aristippi." Va.

had wounded themselves, or otherwise attempted to put a period to their existence, should be punished with 'ignominia.'*

"But the attempt of a soldier on other grounds was a capital offence; or those who, being under prosecution for heinous offences, or being taken in the commission of a great crime, put an end to their existence from fear of punishment, forfeited all their property to the *fiscus*."†

Suicide was not uncommon among the Romans in the latter days of the Republic, and it became very common under the Emperors, which is evident from the examples given by Tacitus, and by the younger Pliny, who mentions the case of Cornelius Rufus (Epist. xii.), Silius Italicus (cxi., 7), Arria (cxi. 16), and the woman (vi. 24) who succeeded in persuading her husband, who was labouring under an incurable disease, to throw himself, tied to her, into a lake. Except in the cases mentioned in the two tables of the "Digest" above cited, suicide was not forbidden by the Roman law, nor was it discountenanced by public opinion.

Voluntary suicide, by the laws of England, is a crime; and every crime is presumed to be voluntary until the contrary is made apparent. But "the crime of self-murder," or *felonia de se*, are terms calculated to convey a correct notion of the legal character of the offence, or the mode in which it is punished. When such a verdict was pronounced, the personal property was forfeited to the crown. The common law, in the case of suicides, followed the canon law; and if declared guilty of self-murder, were considered to have died in mortal sin, and were interred, and a stake driven through the body. But the law was altered, dispensing with the stake. The self-murdered must now be buried at night, between the hours of nine and twelve, in any church or chapel yard, without the performance of the rites of Christian burial.

The "Code Penal" of France contains no legislation on the subject of suicide.

Of the modern codes of Germany, some adopt the silence of the French code, and others vary in their particular provisions.

In the Bavarian and Saxon codes suicide is not mentioned.

The Prussian code forbids all mutilations of the dead body of a self-murderer, under ordinary circumstances, but declares that it shall be buried without any marks of respect otherwise suitable to the rank of the individual; and it directs that, if any sentence has been pronounced, it shall, as far as feasible, be executed, due regard being had to decency and propriety, on the dead body. Besides which, the body of a criminal who commits self-murder to escape the sentence pronounced against him, is to be buried

* Dig. 49, tit. 16, s. 6, De Re Militari.

† Ibid. 48, tit. 31, s. 31.

at night by the common executioner, at the usual place of executed criminals.

The Austrian code simply provides that the body of the self-murderer shall be buried by an officer of justice, but not in a churchyard, or other place of interments.

From all the evidence submitted, it will be obvious that there has been, and still continues to be, many very discrepant opinions on the subject of suicide, which is regarded rather as a positive criminal tendency, than as a result of some form of morbid affection. It would seem that legislators, philosophers, and jurists, appear to have forgotten that man, in a normal state of mental and bodily health, is strongly influenced by an instinctive love of life, and that when he ceases to experience a sense of self-preservation, it is presumptive proof of some derangement of his mental faculties. It matters little, so far as the argument is concerned, how this state has been induced, whether by animal excesses or moral causes, if, ultimately, there is induced a fixed and determinate notion of self-murder, that the very existence of this unnatural condition is absolute proof of mental indisposition; and although this condition is to be lamented, yet it is contrary to a cultivated humanity to treat the dead body with marks of contumely, just as it would be a want of true benevolence because a drunken man had broken his leg, or otherwise seriously injured himself, to neglect giving him the necessary aid under his suffering, and find an excuse for so doing, that he had himself to blame for it! It is, therefore, not in the province of any community claiming to be civilized and humane, to visit on the suicide impotent penalties, such as the stake, or burying him by the common executioner, &c. These useless punishments to the corpse of the suicide do not prevent others, when their minds are in a similar diseased condition; for if they can inflict on their own living bodies deliberate destruction, how little will they think on what may be inflicted on them when they have neither sensation, perception, nor consciousness!

We therefore affirm that, to prevent suicide, we must endeavour to alter the habits of the people; and, as a discussion on this portion of the subject would necessarily lead to many important details in connexion with education, we shall prefer treating the subject in a separate article. This will be obvious, if we copy a brief extract from Kant's "Elementology of Ethics," as this great metaphysician seems undecided whether to assign actual demerit to the suicide. He says, Aptomé i., Chap. 1, "On the Duty owed by Man to himself in respect to his Animal Part:—

"The first, if not the chiefest duty incumbent on man, in respect of his brute nature, is the self-conservation of his animal estate. The anti-part of this obligation is the deliberate and forethought destruc-

tion of his animality; and this may be considered as either total or partial. The total we call murder, and so forth."

Again, on Self-murder, this author says—

"The voluntary divestiture of man's animal part can be called self-murder only when it is shown that such an act is criminal. A crime which may be perpetrated, either singly on our own person, or also at the same time on the person of another—*e.g.*, as when one in pregnancy kills herself. Self-destruction is a crime—murder. Suicide may no doubt be considered as the transgression of a duty owed by any one to his fellow-men—as a violation of the conjugal obligations incumbent upon spouses—as the disregard of the duty owed by a subject to his government (the state); and, lastly, as a dereliction of one's duty to God in this world. But none of these amount to the crime of murder; and the question at present to be considered is, whether or not deliberate self-destruction is in violation of man's duty towards himself, even when abstraction is made from all those other considerations; that is, whether a man ought to acknowledge himself beholden to the self-conservation of his animal part, and beholden so to act, and, too, by force singly of his personality. That a man can injure himself appears absurd (*volenti non fit injuria*); and this was the reason why the Stoics considered it to be the prerogative of a sage to walk with undisturbed soul out of life as out of a smoky room, not urged by any present or apprehended evils, but simply because he could no longer sustain with effect his part in life; and yet this very courage, this strength of soul to advance undauntedly to death, arguing his opinion of somewhat prized by him far higher than life, ought to have taught him not to despoil a being of existence possessing so mighty a mastery and control over the strongest force in his physical system."

He adds something more to the purpose, thus,—

"Mankind, so long as duty is at stake, cannot renounce his personality; that is, by consequence, never, duty being always his incumbent debt; and it is a contradiction to hold that any one were entitled to withdraw himself from his obligations, and to act free, in such sense as need no ground of warrant for his conduct."

We could multiply quotations, but to little practical advantage. The opinions of legislators may be inferred by the laws which apply to suicides, and the theories of philosophers are based upon no certain data; so that, however they may discuss the moral aspect, they appear to be defective in their information as to the causes which may induce the suicidal tendency. Cicero anticipated the true mode of testing the subject, as he affirmed "that a man could not love and hate himself at the same time;" yet this simply states a fact, without giving us its true solution. This could only be obtained by sound physiological and psychological information on the organization of man, the laws which affect it, and which derange the mental faculties; and lastly, to

explain what is his normal state, and what constitutes disease, and by distinguishing between what is a temporary disturbance of function and what a permanent affection, in order to assign the degree and the kind of the malady. By these important sciences the student can learn to distinguish between crime and disease, and to indicate the best way of preventing or remedying such affections; thus proving, in the most emphatical manner, the truth of the Baconian aphorism, that "KNOWLEDGE IS POWER!"*

L.

ART. III.—TENDENCY OF MISDIRECTED EDUCATION AND THE UNBALANCED MIND TO PRODUCE IN- SANITY.

BY EDWARD JARVIS, M.D.,
Dorchester, Mass.

ALMOST from the beginning the risen generations have done what their intelligence, their means, and their conscience allowed them, to aid in the development and training of those who were to come after them, and to lead children and youth through their narrow paths to the highway of manhood. In the way that seemed to them best they have endeavoured to show what should be done with the untaught human mind, as it comes originally from the Creator,—the raw material of thought and intelligence, as it is delivered by Nature into the hands of its rightful possessor or his friends,—and how this should be wrought, shaped and furnished with knowledge of facts and principles, and fitted to bear the responsibilities of mature life. Many have given to their thoughts on this subject a visible form, and sent forth to the broad world treatises on Education, for the benefit of as many succeeding generations as will read them. These have all done, or are doing, their appropriate work, each in its due manner and degree. Generally they have one quality in common,—they treat of man as an integer, an identity composed of body and mind, and presuppose that all have similar powers and similar wants, and are to be educated in a similar manner. Most of them regard the intellect almost exclusively, and propose to fill it with knowledge of various kinds, which may be used for the various purposes of after-life. They propose by proper training to develop, and by suitable exercise to strengthen the mind, and give it power of concentration, energy to grapple with the subjects that may be

* In this paper we have not mentioned the fact, that the disposition to suicide, like to insanity, are often both hereditary. And in many instances, in our notes of such cases, we have evidence which goes far to prove that there exists a similarity in their history:—that they may remain *latent* for years, until some predisposing circumstance develops their active manifestation. And in both forms of disease, if attention is paid to the hygienic laws, they may be prevented from manifesting any morbid consequences.

resented to it, and a capacity to add to its stores of knowledge through its coming years. In this way the perceptive and the reasoning faculties, the memory and the imagination, are cultivated to various degrees, and gain thereby a varied measure of force. This is the usual extent of the plans of education. Even those which are called liberal, and are supposed to be expansive, are commonly limited to the development, cultivation, and discipline of these elements.

In as far as these plans of education are not founded on a proper and comprehensive view of the whole nature of man, and of the great and entire object for which he is placed in the hands of the educator, they fall short of their fulness of purpose; they overlook some of the parts or elements of the human constitution; they leave some of these undeveloped, some untrained, and others undisciplined. The teachers, wanting a thorough knowledge of the material on which they are to operate, and of the fabric which they are to create from it,—without a complete consideration of man in his natural and uneducated state, and of what he may and should be, of the dangers to which he is to be exposed, the burdens he must bear, the responsibilities he may be required to sustain, and the ends he may accomplish,—too often send their pupils forth to the world unfitted to sustain their part in its movements. And these youth, with a disproportionate development of their powers, and without a complete control of their own forces, with minds unbalanced, and wrong conceptions of their relation to society, err in their self-management; they fail to realize their own ideals of life, and are in danger of being overwhelmed with mental disorder.

Comprehensive Plan of Education.—A rational and a natural plan of education looks upon man not as a simple, but as a compound being,—not as a single integral power, but as composed of many and various powers. Among his elements are included not only the body and the mind, but the moral faculties and the appetites, the passions and the propensities. All of these together make up the man. Each has its own definite station to fill, and its special part to perform, in the human economy. In the perfect and healthy man these are all arranged in suitable proportions, and fit in unvarying harmony. Each has its predominant, mediate, or subordinate place; each does its own work, and no more; and all co-operate for the good of the whole,—the health of the body and of the mind,—the elevation and happiness of the being to whom they belong.

In this perfect arrangement the moral power, the nobler element, stands above all the rest, and superintends the actions of the whole. The mental powers, like an intelligent overseer of a manufacturing process under the general charge of the proprietor, mark out the ways, lay the plans, they direct all the organs and

sities are active, or ready to be active, from the beginning; crave indulgence, and, if left to themselves, they hardly bound to their gratification. But, being under the control of higher powers, they are, or should be, restrained within their proper sphere. There seem to be several and various mental powers and faculties, each of which has its special province to fulfil in the human economy, and all of which act in concert. Each performs its own appointed work, and no other more. Each has its due position and its due influence, directing, aiding, or obeying, according to the law prescribed. All of these attributes, or their germs, are given to man from the beginning, but not to all in the same proportion. Yet, with some exceptions, they are given to all in sufficient degree for the maintenance of health, and the fulfilment of the responsibilities of the present being. Some of the powers and attributes, as that for food and drink, and the digestive function, are present in full measure at the beginning of life. Of others only the rudimentary element is given, and these are subject to growth and development from infancy to maturity.

Purpose of Education.—It is the true purpose of education to draw out, cultivate, and strengthen the mental and the moral powers, and to subdue and discipline the appetites and passions. To maintain the healthy physical frame, the various organs of digestion, respiration, and locomotion,—the skin, brain, and nervous system,—are all in vigorous condition and action, none doing too much, none coming short of its requirements, each receiving its due share, none demanding too much of the nervous influence, and each contributing its part to the sustenance and health of the whole. In the mental and moral constitution, the perceptive faculties, reason, the memory, the imagination, the conscience, and the lower powers, should each have its due development and its

repositions; is sure to come to just conclusions; who lays his plans of action in accordance with the measure and kind of his own strength, and with the circumstances amidst which he must operate; and who is certain, under any conditions, to do that which is right and appropriate. This well-balanced mind constitutes perfect mental health. It comes from original harmonious endowment, and proportionate development and discipline; that is, from appropriate education of all the powers. To this point it is desirable that all should arrive when they reach maturity, and are ready to enter upon responsible life, to take upon themselves their own self-management, and to perform their several parts in the affairs and duties of the world.

Law of Growth of the Powers and Elements of Man.—But the education of man is not finished, nor does the necessity of discipline cease with his youth. The growth of the bodily organs alone ends with that period. All the other powers—the mental and moral faculties, the passions, appetites, and propensities—have no such limit to their expansion. They may grow indefinitely even to the end of life, in old age. They may grow with accelerated and accelerating force, each step in the progress increasing the facility of taking another. Every one of these faculties and attributes of man increases in strength and activity by exercise, by use, by indulgence. The growth of the human powers by cultivation is a fixed law; yet it does not operate equally and in the same degree at all times, but with a constantly increasing force by successive repetitions. The longer the cultivation of any faculty or endowment is continued, and the more vigorously it is pursued, the easier its action becomes, and the greater is its accession of strength. The increase is added to the capital already existing, and the augmented capital allows still more rapid increase. As in the progress of fortune all the previous accumulations of money, property, or credit, become capital, by which more and more can be gained, so in the constitution of man all growth of any of the faculties, every new acquirement, every increase of force or discipline, every new elevation of purpose, is a new means of gathering more and more of the same kind; for the universal law of both nature and revelation, that “Whosoever sows, to him shall be given, and he shall have more abundance,” operates in the intellectual and the moral constitution of man, as all as in his outward condition.

On the other hand, as in the decline of fortune every pecuniary loss, and every neglect to secure due and honourable advantage, increases the danger of another sacrifice, and diminishes the power of preventing it, so in the mental and moral constitution every neglect of study or discipline, every misapplication of intellectual force, every perversion of any of the faculties, every undue indulgence of any appetite or passion, every error or sin,

in the study of language, mathematics, natural history, or other branch of literature or science, in the cultivation of moral and spiritual affections, the religious element, the science, the sense of right and wrong, regard to truth, man.

In the intellectual progress, the more one learns, the greater his power of acquisition, and the taste for and the faculty of acquiring increase with it. In the moral progress, the heart is warmed, the greater warmth does it demand to satisfy its desires; the more the spirit is elevated, the higher are its aspirations towards the true and the infinite. We see the same in the cultivation of the tastes, the love of nature, of the beauty of music, of painting, of any of the fine arts. In these the exercise creates strength, and strength gives enjoyment, a craving for more and more, and with these come the means and resolution to obtain greater gratification.

All the other faculties and powers, every appetite and all the lower propensities, are subject to the same law of growth. Among the bodily appetites, the fondness for food, if indulged beyond the natural and healthy wants of nutrition, increases in indulgence; and this goes on, day by day, year by year, until the appetite may become the ruling element, and prevail over discretion and reason. The use of tobacco and opium is a marked illustration of the law of growth; for at first there is only no desire for and no pleasure given by these, but an absolute aversion to them. The mouth loathes, and the stomach is nauseated by them. Yet this aversion is overcome by persevering cultivation, and then a positive appetite for them arises, and this increases by fostering, until it becomes strong enough to govern those who use them, and to make them dissatisfied with everything else so long as this their ruling

passions, of whatever nature, the likings and the dislikes, the sympathies, antipathies, and caprices, all come under the same law, and, when left to follow their own course, uncontrolled by the higher element, they tend to expand and gain power beyond their healthy limit.

As the clay is in the hands of the potter to be moulded into such shapes as may please him, so the plastic elements of man are at first in the hands of his teacher, and afterwards in his own, to be formed and shaped as they may desire and direct. By cultivation of some of these elements, and by neglect and repression of others, one can make himself to be what he pleases. He may give his intellectual, his moral, or his animal nature a predominance. He may become a thinker, a reasoner, a sentimentalist. He may be a philanthropist or a misanthrope, an enthusiastic religionist or a cold-blooded atheist, a wise and sagacious statesman or a crafty politician. He may be a man of serene temper, generous, affectionate,—or he may be irritable, passionate, suspicious, hateful, selfish, miserly. He may be an eater, a drinker, a sensualist in any form, the slave of any appetite, the manifestation of any vice. He may be, almost entirely or principally, any one or number of them in various degrees, according to the way and extent his manifold powers and elements are educated by his teachers, by the influences that bear upon him, by his own self-management.

This Balance of the Powers and Elements must be Maintained through Life.—Each one of the powers, attributes, and endowments of man, being given to him for a definite purpose, each having a special station to fill and part to perform in the work of life, and the co-operation of each being necessary at all times for the proper and vigorous action of all the rest, it is requisite for mental health, and for the preservation of a well-balanced mind, not only that the appropriateness of position and a due proportion of all the intellectual and moral powers should be established during the process of development and growth in youth, but that they should be maintained during the whole of life. From the beginning to the end, each faculty and power should be cultivated or chastened in its due degree. None should be allowed to become excessively strong and active, while others are weak and dormant; none should absorb the force that rightfully belongs to the rest. The higher elements, then, should always be sustained in their commanding position, and the lower should be kept subordinate. The appetites should be indulged, and the propensities allowed to act, only at such times, and in such periods, and so far, as the health of the system requires; and all the passions and the moral affections should be applied to their

legitimate purposes, and to no other. All should be measured, directed, and controlled by the reason, which should reign paramount over these, and yet, in its turn, be the faithful servant of the conscience, rendering it a never-failing and implicit obedience.

This condition of mental and physical health requires—1. Great discretion to determine what the proper arrangement of the faculties or elements of power is, and what their several forces should be, in order that they may make up the perfect man; 2. Constant self-analysis through life, to see whether this due order and proportionate power is maintained; 3. An unfaltering self-supervision and self-discipline, to maintain, in their proper position and relation, all the elements of our constitution and frame, encouraging the higher, directing the mediate, and chastening the lower.

Balance of the Powers Disturbed in some.—In manifold ways men fall short of this perfect standard of mental condition. In some, the deficiency is so slight as to produce no apparent effect on their soundness of mind; in others, it is so great as to produce manifest insanity; and between these two extremes there are all intermediate grades of unsoundness. The slighter variations from this normal standard are very frequent. Even after one has been properly educated, and enters upon maturity, there may be, and there commonly is, some one or more of the powers developed and strengthened beyond the rest, in connexion with some special employment, in the pursuit of some study, in the cultivation of some salutary taste for good, or in the indulgence of some passion or appetite for evil. Thus, in one man, the perceptive faculties are prominent and most active; and he has a quicker eye or ear, and more readily understands what is presented to him, than the average of men. In another, causality or the reasoning faculty prevails, and he quickly sees the relations of things. He traces events back to their causes, and follows causes onward to their results. In a third, conscientiousness predominates, and he is scrupulously fearful of doing wrong. In a fourth, benevolence is the favoured faculty, and he sympathises with suffering more keenly and readily than others. In another, wit is cultivated and made more active than the other powers, and he has a quick perception of the ludicrous, and of singular and droll analogies and relations.

All these, and all the other powers or modifications or combinations of powers, may and do receive in different persons extraordinary cultivation, development, and strengthening, in addition to the original and appropriate education of the whole. Thus men qualify themselves for, and become expert or skilful in, the various professions and arts of life, without diminishing

in good sense in the common affairs of the world, or impairing its balance of mind. Nevertheless, although these minds act well on ordinary subjects, yet they act better on those to which they are frequently directed, and on which they are habitually employed. The mind always runs more readily and easily in its accustomed channel.

We not only labour more easily and effectually on those subjects and in those ways which habit has made familiar to us, but there is a degree, and in some a great degree, of danger that the colour or character of the thoughts applied to these will tinge or modify those which we apply to other subjects. It may control the associations of ideas, and give its peculiar colouring and form to all others.

The *imagination* is naturally among the most active elements of the mental constitution. It tends to influence the associative faculty, and govern the inlets of ideas. It is the foundation of a vast variety of mental error, and often at variance with discipline. It is therefore a very unsafe guide to life and principles. It tends to the constant aid of the perceptive faculty to correct it, and the reason to control it. The *law of association* is a manifestation of its power; circumstances, things, and ideas are suggested according to their natural or artificial connexions. The habit of associating them together gives them an affinity, so that they rise up in the mind in the same series of thoughts. When one is presented, the others follow; and the whole of a familiar scene, or train of circumstances, or range of ideas, follows the recollection of one of their elements or parts. Thus we are reminded of tales, events or trains of facts, by the mention of one single incident similar to any one connected with those that are thus suggested. In such cases, the memory and the associative faculties, which are required to move or act only in an established and familiar course, are more active and energetic than the perceptive faculties, which are acting or endeavouring to act upon a new subject.

While, therefore, the perceptive faculties are trying to present to the mind certain new images, the associative faculties present the old images, and these, mingled together, form a compound picture, consisting in part of the object last presented, and in part—perhaps in great part—of old and remembered objects, which are sufficiently similar to the new to be suggested by it. In these cases the perceptive faculties recognise and convey to the mind much of the new image as is similar to old and familiar ones; but at that point their action ceases, and the mind receives no more ideas through them, but the memory and the imagination fill up the rest of the picture.

From this cause we readily discover resemblances in things

which we see for the first time, or with which we are but little acquainted, to those with which we are familiar. Thus, when one goes from his father's house, and dwells among strangers, he meets many persons who look to him like others whom he has left behind, and he is continually reminded of his home by their similarity. But, after he becomes familiarly acquainted with the new people and circumstances, he fails to see the resemblance, and wonders how he could have seen it before.

This is easily explained by the law of suggestion and the activity of the associative faculties, the memory and imagination, which is greater than that of the perceptive faculties. The home-sick boy's mind is filled with the objects that he left behind; their images are familiar and dear to him, and the slightest prompting calls them up. Meeting a stranger, he sees some feature, expression, or manner,—like a feature, expression, or manner in some one at home. All the features, person, and manners of the absent are associated with this single feature which is thus presented, and are suggested to him by it. Here the perceptive faculties stop, and the imagination fills up the rest of the picture—not with the other features of the person before him, but with those which are familiar to his mind, and dear to his heart.

But after he becomes acquainted with persons of the new place, and his heart is reconciled to those who are about him, and weaned in some degree from those with whom he lived before, the perceptive faculties become more, and the associative and suggestive faculties become less, efficient. Then, when he meets these persons, he sees more and more of their real features, and thinks less and less of those who seemed to resemble them. The outline is filled with the things before him; and that point which alone he had noticed, now bears so small a proportion to those which he now sees, that he finds none of that resemblance which he saw so readily before.

The Ruling Feeling or Interest Colours New Ideas.—According to the same law, any ruling feeling or interest directs or controls the perceptive faculties in greater or less degree, and infuses itself into, and modifies, the images that are received from any sources. The same object, presented to several men who have different predominant feelings or interests, will suggest as many and as various images. In the same landscape, the arrangements of the fields, the gracefulness of outline and detail, present to the painter a fit subject for a picture. Its soil suggests to the farmer the idea of its fitness for cultivation of various crops; the speculator sees its appropriateness for building lots; the geologist, the composition of the earth; the botanist, the various kinds of plants that grow upon it.

In all these and similar cases, the ruling idea, whatever it may be, directs the perceptive faculties in some degree, and compels the eye to see, and the ear to hear, and the mind to perceive, that which is in accordance with itself, and prevents them from recognising that which is not in harmony with it. More than this—it accepts the suggestions of the memory and the imagination in place of the present realities which the perceptive faculties, uncontrolled by such influence, might have discovered.

For this reason, witnesses, who testify for opposing parties and interests in courts, may very honestly give very different accounts of the same occurrences or things which they both had seen. Each one saw and perceived the most readily that which was most consonant with the previous feeling or interest; and these modified the remaining perceptions, and controlled the inferences.

Even philosophers, or those who intend to be philosophers, are sometimes subject to this error in their investigations. If they adopt a theory on any subject, its influence, to a greater or less extent, controls their perceptive or reasoning faculties. The former most readily, and perhaps exclusively, recognise those facts which are in harmony with the preconceived idea; the latter draw conclusions corresponding to it; and the imagination fills up all the vacancies in the picture. Hence, these men are apt to find confirmation of their doctrine in their discoveries. And when men having opposite theories of the same subject are in some manner of confirming each his own from the examination of the same facts.

The moral affections and the passions have a more powerful influence in controlling the perceptive faculties and the reasoning, than even the pre-occupation of ideas. We delight to clothe one whom we love with the raiment of beauty. We see in him virtues and powers which less partial friends cannot discover. The evil passions have more absorbing power, and are complete government of the channels of ideas. When one is excited with anger, or when he permanently hates, the eye is closed, and even blind, to discover virtue, propriety, or reasonableness in the object of his ill-will. Seeing through the preconceived idea, he clothes this object with evil and wrong; reason is suspended, or made to subserve the passions, and aid in establishing conclusions corresponding with his predominant emotions, and these compel him to utter language he would not have spoken, and to perform deeds he would not have found a motive for doing, when not under the influence of passion.

Effect of Habit on Mental Action.—Whatever power or element is accustomed to action, acts more easily than such as have

lain comparatively dormant; and in whatever way any of the mental or moral powers are used most, they find more ready action there than otherwise. This is the most agreeable, as well as most easy, and our feelings prompt us unconsciously to let our thoughts run in this course.

These imaginative habits sometimes become very powerful, and require vigilance and self-discipline to control them, and prevent their controlling us. The mind of a student, who has great facility in making puns, runs so readily and insensibly in this way, that sometimes, when he attempts to study, he finds it difficult to prevent his analysing words, and forming new combinations of syllables, to make out some new and strange meaning.

Unbalanced Mind.—Although all of these are consistent with what is usually called mental health, yet such men have a disproportionate distribution of mental force; some ruling idea has undue prominence in, and often undue control over, the mind, and they are, in certain ways, unbalanced; still, as they retain their reason, and can correct their error of judgment by comparing their false perceptions and conclusions with those which they know to be true, they are presumed to be sound in mind.

Danger of its Growth.—As all habits and powers, all passions and propensities, are liable to grow by exercise, every one of these irregularities may, by cultivation or indulgence, become so strong as to overcome the reason, and cut off the means of correcting mistakes in judgment, and thereby establish insanity. It is the first step that costs; the others are most easily taken. The only absolute security for the mental balance is in the utter avoidance of even the least perversion of thought or feeling.

Some are led to begin this course of error by distinct and well-marked tastes for it. In others, a feeling is accidentally excited; it may be very slight at first, but by repetition it gains strength, and ultimately becomes powerful. This is remarkably manifested in the caprices and perversities. The mind capriciously determines to be pleased with a small point, and through this sees all the rest. This prepossession compels the perceptive faculties to present the acceptable trait first to the mind, and put it in good-humour to see those associated with it, and then it looks upon them at least with toleration. By repetition, the toleration becomes satisfaction, and approbation follows after. At last, the whole mind is brought under the power of the caprice; then opinions are formed, and a course of conduct pursued, from which the reason at first would have shrunk; but being disarmed and made the servant of passion or caprice, it goes to strengthen the error and overthrow the judgment.

Day-Dreaming.—The day-dreamer loves to form an ideal

image of that which he would like to be, and of that which he would wish others be, or of what he would like to have done. For this purpose, the images derived through his perceptive faculties are only used as suggestions of better images, or better arrangements of facts and circumstances; something unreal indeed, but more satisfactory than that which is presented to his senses. In this the reason is suspended, for there is no wish to make the ideal image correspond with any rule of truth. Comparison is set aside, for no known standard is to be the measure. But the dreamer is at liberty to create whatever he will, and this he does in a form and manner most agreeable to his taste and his ruling element. Thus he improves upon the circumstances, or acts, or speeches that are presented to him, and frequently makes himself the principal actor or speaker in the scene of his new creation.

This habit belongs to those who have large self-esteem, or large love of approbation, more than to others; they love to form desirable scenes of distinction, of influence, or even of glory, in which they place themselves. From the little boy who delights to imagine himself the drummer of the train-band, up to the man who indulges the dream of his being a commander, an orator, or philosopher, there are all stages of progress, and all grades of imaginary life and position.

At first, and in some, this may be an honest conception of improvement upon that which is seen and heard. When one sees some work performed, he may readily imagine a better way, and think that he would do it according to the ideal. If he hears a speech, he may conceive of a better argument and an improved series of ideas, and he would so present them if he were the speaker. It is a reasonable gratification to conceive of images of perfect virtue or noble action. One, therefore, easily allows himself to create this ideal of life and thought, and even to place himself in the centre. It is so pleasant to see one's self in a satisfactory position, that the dream is again indulged. By repetition it becomes more and more easy, and even attractive, and then those who have fallen into the habit find it difficult to escape from it. It is hard to fix their attention exclusively upon the realities of life, and prevent their thoughts from wandering to imaginary scenes, where all is satisfactory, but where none is actual, and but little is true.

Knowledge to be Acquired in Youth.—Beside the work of development and discipline, of harmonizing the several elements of the mental and moral constitution, of establishing each in its due position, and giving to each its proportionate and appropriate force, it is the further purpose of education to instruct the youth in facts and principles, to teach them their own nature,

their relation to the world and to outward things, and their responsibilities in their several positions, and to fit them to discharge the duties that must come upon them. It should also prepare them to exercise a constant self-control, and to apply their powers, on all occasions, to proper and desirable purposes.

Defective Plan of Education.—Notwithstanding this plan of education seems not only reasonable, but absolutely necessary for the fulfilment of its object, yet many come short of it, and include only a part of these requisites; and others are still more meagre, and include within their scope none of those things which are the support and direction of every man and every woman, in their true and successful walk through the earth. However valuable the knowledge they impart may be, still the one thing needful—the knowledge of themselves and of life, of external nature and of man, and the relations of these to each other—is not given; and the pupils who are thus trained are sent forth to grope their way through the world, without that light to guide them, and to struggle under their responsibilities of life, without that strengthening and discipline which they should have received at school in their early years, and the forming period of their existence.

In these systems of education, it is interesting but painful to see how many needless things are carefully provided, and faithfully done, and how many necessary things are entirely omitted; and when the teachers have finished their work, and the pupils have acquired all that is offered, it is mortifying to see how little it can avail them in bearing the burdens and discharging the duties of life. In these schools the scholar may accumulate the vast treasures of knowledge, and yet be poor indeed in all that will establish and sustain him in the position of life, health, success, and happiness, for which he seems to be destined. He may fathom the depths of chemistry, and analyse all compound substances of earth, of vegetation, of animals, and spread before his clear vision their secret elements. He may know of what the mineral, the plant, and even flesh and blood are composed, and yet be ignorant of the elements of his own constitution—of the nature, extent, uses, limits, and liabilities of his own powers of body and mind, of emotion, and of passion. He may comprehend all the principles of material philosophy, and the measure and character of the natural powers, and understand how to bend them to his purposes. He may master the elements, and compel the waters, the air, steam, gases, electricity, to lend their forces and labour at his will: he may make them bear his ships, turn his machines, and carry his messages, and yet know not the nature and use of his own vital machinery, nor how to apply his

own internal forces, to control his appetites, and govern his passions. All external nature may be made to serve him, and do the work of his bidding, and he is successful in his plans connected with it; but the elements of his own being, body and spirit, are not at his command, and in his endeavour to use them, he cannot gain and enjoy health, and sanity, and duration of life, he falls ill, because for these he was not prepared.

There are other plans, or rather customs of education, far worse than these. Their sins are not merely those of omission. They teach not merely facts that are useless, and principles that have no practicable use, but they teach positive error. They give wrong notions of life. They excite expectations which cannot be realized, and lead their pupils to form schemes inconsistent with the circumstances which must surround them. One of the common faults of such education is to develop and cultivate unfounded hope and ambition, rather than discipline and laborious patience. Under this system, youth are induced to form purposes which they have neither the strength nor the industry to accomplish, and for which they have made and are making no suitable preparation. They are encouraged to look for a degree of success in life, a measure of prosperity, of respect, and of influence, which they have neither the talent, nor the wisdom, nor the power of adaptation to obtain. Their expectations are rather in accordance with their desires, and perhaps with their self-esteem, than with the fitness of their plans, or their perseverance in accomplishment.

Starting with wrong notions of life and of their own relations to the world, and with false conceptions of things as they are, they err in their purposes and expectations of present existence, and in their ideas of self-management, and fail to adapt their plans of action to the opinions and customs of other men, and to the circumstances of the world amidst which they live. Deficient in that good common sense which would always establish and maintain a true and certain relation between their own ideals and the realities of the world, they frequently fail in one unsuited purpose, only to enter upon another alike unsuited. Of course disappointment follows them, because they expect impossible results, and neglect to use the due means and energy to obtain them. Experience does not teach them wisdom, and they do not learn, from one failure, how they may avoid another. Successive defeats distress and confound them more and more; they become less and less able to adapt themselves to things as they are; until, at length, some of them sink into hopeless confusion, and others into mental disorder.

Want of Plan of Life.—There are some who have no settled plans of life to follow—no determined purpose to fulfil. They are

deficient in firmness, and unwilling or unable to persevere in what they undertake. They enter upon schemes without a clear conception of what their ends should be, or how they should be accomplished. They are often weary of their purpose, and leave it even when it may be approaching a successful issue. Wanting a balance-wheel in their mental machinery, they are governed at one time by one motive, and at another by a different one; or, undecided which of two or more diverse motives to obey, they follow one in part, and another in part, but yield fully to and derive advantage from neither. In their indecision, they sometimes adopt several contradictory or irreconcilable plans, and of course they fail in all. Thus they are turning from purpose to purpose, floundering amidst difficulties and unyielding circumstances, striving in vain to make opposing plans and conditions harmonize together.

Indiscretion.—Akin to the last class are the indiscreet, who likewise labour under a disproportion of mental development and action. They have indistinct perceptions, but are impatient of investigation. They have active imaginations, which to them seem to compensate for the want of persevering cultivation of the perceptive faculties and of cautious comparison. They have a habit of rapid deduction, and draw ready and bold inferences from few and insufficient data. They are the people whom the philosopher describes as learning a few facts, guessing at many more, and jumping at a conclusion. They form their opinions without knowing or considering all, and perhaps not even the most important, facts that should be regarded. They arrange their plans and conduct their business, they manage themselves and their affairs, with the same imperfect regard to the facts and circumstances that should govern them, as they manifest in the formation of their opinions, and they are necessarily unsuccessful.

On account of their loose habits of reasoning, and proneness to form hasty opinions, these are considered by their associates as men of unreliable and even unsound judgment. Their mental condition is not insanity, but, in some of its phases, there is a great similarity between them. There is a want of a due distribution of force and activity among their mental faculties. They especially lack the necessary activity of the reason to correct their errors of judgment. And though their opinions may be often changed, they discover no mistake in the process through which they are formed. This class, therefore, rarely improve. On the contrary, there is danger that this disproportionate activity of their imagination and slowness of their reason will increase, disturbing the balance of their minds more and more, and rendering their judgment less and less sound through the progress of years.

Love of Excitement.—The unbalanced mind is sometimes manifested in love of excitement—in the uneasy restlessness of those who do not find sufficient motive of action in the ordinary affairs of life, and the usual interests and affections of home. These persons crave something out of the common course. As intemperate want alcoholic drink to stimulate their bodies to action, and feel languid without it, so these desire some enlivening circumstance, event, or company, to give activity to their minds and buoyancy to their feelings.

At their homes, and in their own families, they are comparatively languid and listless. Some of them are not interested in domestic affairs; and, when no strangers are with them, some are careless as to their manners, and negligent as to their dress. Interested in no occupation, they dawdle away their time, which, for the want of satisfactory employment, passes wearily onward in one opportunity of indulging their excitability to another. When in company or abroad, they are lively, bright, and joyous. Their spirits are full of energy, and their minds are active, and they are acceptable companions in society. But when they return to their homes, or when their company departs, they sink in to their usual languor and indifference. Many of these are fond of amusements, and especially those of a public nature. They love the theatre or concerts; they frequent the lecture-rooms, or other places of general gatherings of the people; they frequent places of public promenade; they take advantage of every opportunity may be within their reach to indulge themselves for new means of excitement.

Some demand even greater changes than these: they want changes of home. At one season, they go on distant journeys; another, their dwelling is at the sea-shore; and anon they visit the mountains. They go from the city to the country, and from the country to the city. These changes, which the well-balanced mind only wants as occasional relaxations from protracted labour are, seem to the restless lover of excitement to be necessary for a satisfactory life. Others are more quiet in their physical habits, but yet have the same mental restlessness. Some find means of gratifying their excitability in reading novels and books of thrilling interest, some in reading newspapers, some in speculations of politics, in hearing and telling news, in the gossip of the neighbourhood.

In this varying course and habit of life, the alternations from excitement to languor and from languor to excitement, successively, is exhausting to both the physical and mental constitution. If the excitability is indulged and cultivated, it grows stronger and more; the mind becomes more dependent on some external and stimulating influence for its lively enjoyment, and

grows more languid in the interval, and then the ordinary affairs, the humdrum of every-day life, grow less and less interesting, and even burdensome; the mind is dull, and the temper may become irritable and peevish.

After years of this indulgence, in some persons, pleasures, company, and novelties pall upon the heart; the mind is wearied with that on which it feasted before, and sinks into permanent languor, or becomes so unstable in action that reason loses its power by any effort to direct it.

The frivolous have similar elements of error. They have no elevation of purpose, no stability of character, nor perseverance in action. They are satisfied with small and temporary matters. They are unwilling to take upon themselves the heavy responsibilities of life and society. They trifle with serious things, and treat grave interests with levity. Their delight is in present amusement, the idle occupation of the hour, and beyond this they feel no anxiety. Their unbalanced minds wither with their exhaustive activity, and they faint beneath any burdens that may be laid upon them. The pursuit of pleasure and all amusement, when followed as a principal object, and not as an occasional relaxation from the business of life, both tend to the same result—they waste the mental powers, and exhaust the moral force, and leave their devotee in a state of helpless imbecility.

Eccentricity.—A fondness for notoriety is a tempting passion for some, but it is dangerous to the balance of mind, and often destructive to mental soundness. A perverted taste, a false estimate of themselves and of mankind, or a desire in some way or other to be noticed, leads some to assume habits of thought, or speech, or of body, which will distinguish them as different from the world amidst which they live. From the man who burned the temple of Ephesus that the world might know and remember him, to the College youth who kept a coffin in his room to make his acquaintances stare, men have sought, in manifold ways, to attract attention, and to impress themselves upon others. One is habitually gruff in his manners; one violates the ordinary forms of politeness. Another is peculiar in the form, or colour, or material of his clothing. One affects to be remarkably sincere, and gives opinions and states facts out of place and out of season; or he loves to differ in opinions on ordinary matters, and to say strange and startling things, or, by some other singularity of thought, or language, or conduct, he manifests his eccentricity to the little or great world who surround him.

The greater part of these peculiarities are voluntary, at least in the beginning, but they are established by repetition; habit makes the eccentric mode of speaking, or thinking, or action, the easiest, and then, perhaps, without intention, or even thought,

the odd man presents himself in this manner to his associates, with little power to control and direct his thoughts and actions as other men do. In this class there is a want of mental discipline, a defective action of the reasoning faculty. They do not compare themselves with others; or, if they do, they do not see that, although they attract observation, they fail to secure respect and confidence. They do not discover that the world values its own opinions and customs most, and that whosoever violates the least of the requirements of the average common sense makes himself suspected of a liability, at least, to violate any or all of even the greater matters of that law, and is to that extent unsound in mind.

There is a natural and a just ground for distrusting the soundness of the judgment of those who allow any sort of oddity in themselves, or in whom it is even involuntarily manifested. If the reasoning faculty is resisted and set aside in one thing, it may be in another. If self-esteem, will, or caprice, rise above it at any time, and claim to interfere with the balance-wheel, they will do the same at any other time, whenever occasion may seem to them to require. The reason which is dethroned, or the judgment which is impaired, in connexion with any eccentricity that is adopted or allowed, loses the certainty of its paramount authority, and may fall again at any time.

Self-esteem.—Self-esteem in many ways disturbs the mental balance. It makes self the most active principle of faith and action. It gives a value to whatever proceeds from, or is connected with, self. It makes the perceptive faculties and the reason alike its servants. It allows the one to discover so much as is in harmony with it, and the other to make only such comparisons as will exhibit self to the best advantage, and never that which would mortify it.

Believing in themselves first, those in whom self-esteem is active are averse to laborious investigation and the slow process of reason, for they feel that they are sure to be right in their conclusions, whatever may be their foundation. They therefore draw inferences boldly from new facts, and form opinions freely upon subjects of which they have but little knowledge, and adhere to them with firmness, and speak of them with confidence. They are opinionated, and love to talk oracularly. They are sometimes fond of argumentation, and desire to impress their opinions upon others; and thus they become dogmatists. But their careless habits of reasoning and induction fail to convince others of that in which they have undoubting confidence.

They are impatient of contradiction, because that is an impeachment of their fundamental principle—faith in themselves. They are apt to become boasters, for they think their own acts

and acquirements are as important to others as, in their own eyes, they seem to be. Striving thus to grapple with subjects which they cannot understand, or which they do not use the proper means to master, struggling in positions where they must often fail, their minds sometimes stagger, their mental balance may be entirely lost, and need a healing process to restore it.

Malignant Passions.—All the evil passions—anger, violent temper, hatred, malice, envy, and jealousy—are even more injurious to the balance of the mind than any of the merely mental disproportions. While these are in action, they absorb the whole man, his emotions and mind. They direct the perceptive faculties, they control the reason, and subvert the judgment. A man in a passion sees in the object of his anger those qualities, and only those, which he wants to see, and his imagination fills up the rest with such as correspond to his own state of feeling. He clothes his antagonist in a garb of his own creation, and then finds undoubted proof that he is wrong. The one offensive point stands for the whole, and those which are true and acceptable are overlooked. The paroxysm of rage may be but momentary, yet it is violent, and gives a shock to the whole mental and moral constitution. The feelings remain disturbed, the reason does not at once regain its ascendancy, but continues, for some time, the servant of the exciting and the maddening passions.

Malignity, hatred, jealousy, and envy are less violent, but more abiding. They have the perceptions and the reason less exclusively under their control, yet they have these powers more or less at their command, and influence the judgment. They enter into, and form a part of, the estimate of objects. They certainly disturb the balance-wheel of the mind, and leave it to run irregularly and uncertainly.

Let us now hear the conclusion of the whole matter. All the original and natural endowments of humanity, the mental and the moral powers, are distributed unequally among men. These are frequently irregularly developed, disproportionately exercised, and are often misapplied; they therefore need great discretion for their education in the beginning, and constant watchfulness and discipline for their government through life. The lower powers—the appetites, the passions, and the propensities—are by nature sufficiently active, and constantly seeking gratification. If indulged, they grow to an unhealthy extent. In some they grow exorbitantly, and even destructively. Therefore, they constantly need the control of reason and the supervision of the conscience to restrain them within the bounds appointed to them for the good of the whole.

From all these causes, singly or combined in many complica-

is, there arise manifold varieties of waywardness, which we find, in some form or other, in every society.

In all these persons the balance of mind is more or less disturbed, and the soundness of judgment is more or less vitiated.

From all proceed at times, opinions, language, or acts, that, even by themselves, would be deemed insane.

All these perversities are subject to the law of growth by ingenuity and cultivation, all disturb or weaken the reason in various degrees, and all tend to overthrow it completely and produce an acknowledged insanity. The danger of those who allow this is not outward, but inward. Their enemies are they of their own household. They go from strength to strength of waywardness, and from weakness to weakness of judgment, until it is lost. The whole of these classes which we have here described constitute a pyramid of error. The lower stratum, or larger class, composed of those who are educated imperfectly, or for undue purposes of present being; in whom some of the mental or moral faculties are left dormant, and others energized and quickened to disproportionate action; whose education either negatively fails to fit them, or positively unfits them, for the world and its unavoidable circumstances. The next stratum is composed of those who start with, or at any time adopt, wrong notions of life and its responsibilities—of what they may gain, and of what they must endure.

After and above these are those whose minds, in the progress of life, from manifold causes, and in numberless ways, become unbalanced to a greater or less extent; who are struggling to accomplish impossible purposes, or to gain things beyond their reach; of whom some are quailing in disappointment or withdrawing into weakness, and others are approaching, or even standing upon, the confines of mental disorder.

The apex of the pyramid is crowned with those whose reason has fallen in the struggle, and in whom insanity is established.

Considering how richly nature has endowed humanity, and how long, perfect, and happy a life she has offered to man and to man the means and the opportunity of obtaining, by education, by instruction, and by self-discipline, it is melancholy to see how many there are who belong to this pyramid of error, of weakness, and of perversity. There are few persons of so limited preservation as not to find within their own range some who are walking in these dangerous paths of waywardness—whose minds, in some measure unbalanced—who are in some degree the subjects of passion, and temper, and propensity—who are more or less influenced or even governed by caprice, undisciplined feeling, or fitting desires.

Some of these have little or no firmness of purpose—some are

immovably obstinate, wilful, and headstrong—some have no plans of life, and others have plans that cannot be reconciled to the circumstances that must surround them. In some there is a restless seeking for that which they cannot obtain, or which they cannot enjoy when they reach it. Some give an undue importance to whatever interests their feelings, and make mountains of molehills; others frivolously trifle with grave matters, and make molehills of mountains. But they are all travelling in that road everywhere strewed with error and failure, and where insanity often lies; and although, perhaps, only a small portion of them may arrive at that terrible end of reason's reign, yet they are all, in greater or less degree, unsound in mind; they are all, more or less, prominent candidates for lunacy; and no one is safe who thus allows his mental balance-wheel ever to be disturbed.

The general attention is so little directed to these dangers—so few are educated to meet and escape them—the public conscience is so little trained to feel responsible for mental health, that when insanity, through any of these ways, comes upon one, the friends are taken by surprise; they speak of the mysterious ways of Providence, and wonder that one so gay, so hopeful, should be bereft of reason.

But, as the abundant weeds and the stunted grain in the farmer's field are plainly chargeable to negligent or unskillful cultivation, or as spendthrift habits lead to poverty, so the insanity of many is plainly referable to the misdirected education which their parents gave them, to the unfitting habits which they established, or to the unbalanced mind which they cultivated.

ART. IV.—ON THE PARALYSIS OF THE INSANE.*

BY PLINY EARLE, M.D.

IN previous issues of the *American Journal of the Medical Sciences*, I published two series of cases of that peculiar disease termed by the French physicians, *Paralysie générale*, and by the English and the Americans, *Paralysis of the insane*, but for which I ventured to suggest the name, *Partio-general paralysis*.

Those cases included all the distinctive characteristics of the disease, and the number of autopsies was sufficient to furnish a pretty clear idea of its cerebral pathology. Most of the cases, a Report of which it is proposed to include in this article, present peculiarities, or exceptional characteristics, which render them worthy of preservation. In the one first presented, the disease ran its course so rapidly that the patient was exhausted before the extreme symptoms of paralysis had appeared.

* "American Journal of Med. Sciences." Editor, Isaac Hays, Philadelphia.

CASE I.—Mr. — was born in the interior of the State of New York. He was of medium stature; his hair was light-brown, his eyes blue, and his temperament bilious-nervous.

He learned the business of printing, and worked at it for some years. His intellect was above mediocrity, and his acquirements became such, that at length, and during a term of several years, he was an assistant editor of a newspaper in the city of New York.

In business, he was industrious and persevering; in habits, generally esteemed correct, although, from early life, it is supposed that he gave a pretty free rein to the venereal propensity. He also drank wine, but perhaps never to intoxication. He was married, and had several children. It is said that his parents were both "eccentric," if not insane.

In the summer of 1847, it was observed that he had become un-naturally irritable. This disposition increased upon him through the ensuing autumn and winter, and in the spring there were some violent symptoms of insanity. He, however, continued in his business until about the 1st of May, when the disease prevented the further performance of his duties. On the 10th of May, at the age of forty-two years, he was brought to the Bloomingdale Asylum.

Condition on Admission.—He is restless, excited, and incessantly talking, if any one be present. Countenance animated; pupils contracted, unequal—that of the right eye the smallest; tongue moist, allid, smooth, and very slightly coated; pulse considerably accelerated. No abnormal sound of the heart.

May 11th. He occupies one of the best rooms, and, if alone, is quiet. He says the Common Council will give this Asylum to him. He will save four hundred mechanics here, and will raise vegetables enough to supply the city. He will want two or three clerks, and three secretaries. He will give ten thousand dollars to stay three weeks and carry out his plans; or he will buy the place in less than a week, pay one hundred and fifty thousand dollars for it, which will not be more than a cent to him, will have all luxuries, and supply all the other patients with them, and will cure all the patients by a special course of treatment.

He has a very slight impediment in his speech. In the midst of conversation, he stops to whistle or to sing.

13th. He says he is the cream of American patriotism, and that God has revealed to him all the events of the last six weeks. He is restless, loquacious, petulant; sheds tears, and asks if Washington is not here.

14th. He mentions the names of several attendants and patients, calls them as his illegitimate brothers, and offers each of them "a marriage, horses, and twenty thousand dollars, to start upon." Says that he shall be the next President of the United States, and that the epidemic came down last night, and rested on the window-sash, and is still in that cloud (pointing upwards through the window), ready to come down at his bidding.

15th. He asserted that he is the "Duke of Gloucester, and entitled to the throne of England, of which Victoria is not the legal possessor."

A few minutes afterwards, he said he was President of the United States and King of England; that his legs are iron, and that he wound up the sun yesterday.

16th. He calls one of his fellow-patients the Pope, and to several others gives the titles of some of the English nobility.

20th. His excitement has gradually increased from the time of admission. Having become very boisterous, both by day and night, and having begun to destroy furniture and clothing, he was now removed to the ward for violent patients.

21st. He declares that he is the son of the King of the world; that he was in the Crusades; that the writings of Shakspeare and Scott are merely a record of his life; and that he had a conversation with the Black Prince the night before last.

22nd. Says he killed Abel in the garden; that Eve was his mother; that all the people in the world are descended from him; and that the Dutch Queen had such an affection for him, that it made a tumour grow on his right side. He is much excited, very noisy at night, and destroys clothing.

23rd. On entering his room, I said: "You are noisy!" "I've a right to be," he answered. "I'm the god of thunder!" His tongue, as usual, is covered with a thin, white, strongly adherent, pasty fur; bowels habitually costive; right pupil smallest—both contracted; pulse 96, regular; sounds of heart, normal; general sensation, obtuse. He has emaciated constantly since admission.

26th. He tore his bed to tatters "to find his cattle;" says he can jump over the house, but is so large he cannot go through the door; tells the physician that he can hold him on his little finger, and could sustain the weight of the world if he had a foothold.

Neither his mental nor physical symptoms changed during the early part of June. On the 19th, his scalp, forehead, and right arm, were much tumefied and ecchymosed, as if beaten against the wall. Being asked how it was done, he laughed, and said: "Jesus Christ did it." Towards the end of the month, and in the early part July, he became more emaciated and feeble; his excitement was less constant, but occasionally, even in the latter part of July, he was very turbulent. At the close of the month he was nearly exhausted, all the worst symptoms, both mental and physical, above-mentioned, continuing. Almost the last words he uttered were an assertion that he was one of the men mentioned in the Old Testament. Died, August 2nd, 1848.

Treatment.—Purgatives, alteratives, and tonics. A seton was inserted in the back of the neck on the 23rd of May, and continued until his death. The discharge from it was never copious. Regardless of all medication, the disease regularly proceeded towards its fatal termination.

Autopsy, sixteen hours after death.—Pericranium pretty strongly attached to the skull, and but little blood in the vessels. Cranium adheres more than normally strong to the dura mater. It is of ordinary thickness, and not unusually hard. The dura mater adheres to the subjacent membranes on the anterior lobes, and for three inches over the vertex, on the border of each hemisphere, beside the longitudinal

sinus. The latter attachments can be separated by dissection alone. The whole brain, when removed from its cavity, appears unnaturally soft or flaccid, and its weight, when laid upon its base, partially tears asunder the corpus callosum. The arachnoid is thickened, semi-opaque, and strongly adherent to the pia mater upon the whole surface of the cerebrum, except the base, where it is normal. The pia mater adheres so strongly to the cortical substance, that on removal it brings off small patches of it. Blood-vessels not remarkably injected. The cortical matter is of normal colour, but is decidedly softened. The brain being cut, the surface of the medulla is interspersed with some bloody points, but they are not numerous. The corpora striata, and the medullary matter around them, are thought to be somewhat softened—the most so in the right hemisphere. The fornix is very soft. The pineal gland contains very little sabulous matter. There are filamentous adhesions between proximate surfaces in the fourth ventricle, and at the base of the brain. One ounce of serum in the ventricles and at the base. Cerebellum thought to be somewhat softened. Its investing arachnoid apparently normal.

Considering the protracted course of the next case, and the comparatively extreme degree of the paralysis of the voluntary muscles, it is remarkable that the functions of the digestive organs were so little impaired, and that the patient was exempted from those sloughing ulcerations which are one of the most striking characteristics of the disease in its severer forms.

CASE II.—Mr. — was a native of the State of New York. He was tall in stature, his hair black, eyes blue, temperament sanguine-bilious, the bilious greatly predominating, constitution *mediocre*. His intellectual faculties were fair, and he received a good English education. Being devoted to mercantile pursuits, he emigrated to a southern State at the age of between twenty-five and thirty years, established himself in business, and was sufficiently successful. He was never married. It was said that his habits were correct, but by persons who had no intimate knowledge of his course of life. His mother was eccentric, but it was asserted that he inherited no predisposition to mental disorder. At the age of thirty-five years he had scarlatina; and at the age of forty-three, what is described as a “slight attack” of paralysis. He lost his property, and became excited with political affairs; but whether prior or subsequently to the commencement of insanity, could not be accurately ascertained.

Having become insane, he was brought by sea to New York. On board the vessel he was so violent that he was most of the time kept in a strait-jacket.

On the 18th of March, 1848, at the age of forty-five years, he was taken as a patient to the Bloomingdale Asylum. He was then emaciated; his skin sallow; the tongue furred and pasty; bowels costive; pupils unequal, the left being the larger; speech imperfect and hesitating; gait faltering. He appeared bewildered; thought he was in Savannah; said he saw an angel on the previous night; would begin to speak, and, forgetting the idea, run to another subject.

He slept but little, at night, during the first few weeks after admission; but he could not bear opiates. One morning his forehead was severely bruised, probably, as has occurred in other cases of the kind, by running against the walls. On being asked how it was done, he said, "The raft slid into the river and many people were killed, but the ladies walked across the plank of the steamboat and were saved." On the 14th of April he said that he was in a southern city, and that on the previous night they "stuck him into a rotunda to sleep." A copy of a New York newspaper being handed to him, he appeared much astonished, and remarked that "it must have come by telegraph." General sensation was then very obtuse. On the 16th, he said that in the night he saw five or six hundred little soldiers, beautifully dressed, and on horseback; they were not larger than his forefinger, but they "fought the Bostonians courageously, like tigers." His bed being wet, and emitting a strong odour of urine, he was asked the cause of it, and answered that some person opened his window, and a shower coming up, it rained upon him—but it was warm rain. The night was clear. On the 20th, his appetite was good, and he was gaining flesh and improving in general health. He said he had some barrels of the best wine in the world; and, assuming a very earnest, business-like manner, requested to be let out into Broadway, as he was going to the banks, and was afraid he should be too late.

In the summer he took Lugol's solution of iodine; and a seton, which was introduced on the 4th of April, caused a free discharge. He gained flesh, and his general health was good. His mental condition varied, but was at no time much, if any, better than at the time of his admission. He had but little memory of recent events. Soon after a visit from his mother, he said it was more than a year since he had seen her. In the early part of August it was perceived that he had lost the sense of taste. He ate all kinds of food with equal relish. In the early part of September, his feet were œdematous for a few days.

On the 17th of November his pulse was 76, regular; pupils unequal, the left being the larger; appetite voracious; face and feet œdematous; gait unstable. He walked with his feet far apart, like an infant; the grip of the hand and the strength of the arm were feeble; speech considerably impeded, but less so than at some former times. At this time he occasionally tore his bedclothes, and upset the furniture in the room. On the night of the 29th of November, he thought the earth was sinking, and, in order to save himself, he turned his bedstead up upon the side, and seated himself astride it. He said he was thus enabled, by using his utmost exertions, to save himself from being engulfed. His speech was now much more impaired than at any previous time. General sensation was nearly null, but existed to a greater extent upon the legs than upon the superior portions of the body. His feet and hands were somewhat œdematous. He asserted that he could run twenty-five miles in an hour, or walk twenty miles, and that he owned six hundred acres of land at the South and one hundred acres in Harlem, occupying the latter as a barber's shop. Being requested to write a letter to his mother, he sat down, and,

after much labour, hesitation, and alteration of orthography, produced a document, of which the following is a copy :—

“Mrs. Decar Motherr
Vder as — this 29th Jurly
b — o gond to
\$18. S. DOOCCKET.”

The signature bears no resemblance to the name of the patient, except that the initial letters of the former are the first two of the three which belong to the latter.

There was no material change in his general condition at the time I left the asylum, in May, 1849. Neither was there, as I am informed by my successor, Dr. Nichols, throughout that year. During the whole of his residence in the asylum he never recognised, as an acquaintance, any person except his mother. During the last six months of his life he did not know even her. In the early part of 1850, the power of the voluntary muscles visibly diminished, but most rapidly in the lower extremities. For six months before his death he could not walk without aid. His digestive functions remained but slightly impaired until the 5th of August, 1850, when he was attacked with diarrhœa, and died on the following day. No autopsy.

The third case is exceptional, so far as my observation is concerned, in the striking similarity of its earlier symptoms to those of *mania à potû*. The disease was rapid in its course, and all its other characteristics would probably have soon assumed their worst form had not the patient been carried off in an attack of cerebral congestion.

CASE III.—C. — was a native of Ireland. His constitution was strong, frame robust, stature medium, hair sandy, eyes grey, temperament sanguine, intellect *mediocre*, education common. At the age of about twenty-two he emigrated to America, settled in the city of New York, and established himself as a retailer of liquors. He was subsequently married. He afterwards became addicted to the daily use of alcoholic drinks, though not frequently to intoxication.

In September, 1846, when he was at the age of twenty-eight years, he lost a favourite child, and his friends say that his insanity appeared immediately afterwards. He was subjected to no medical treatment. For four weeks he gradually grew worse: was restless and talkative, and indulged in extravagant schemes of business, made imprudent purchases, and wandered about the city, apparently without any definite object. At length, having determined to go to Ireland, he went to a wharf, jumped into a boat, and rowed himself out into the river. His determination then changing, he leaped into the water, and swam to the shore.

A day or two after this occurrence, and on the 16th of October, he was brought to Bloomingdale Asylum. His friends asserted that he inherited no predisposition to mental disorder, and had always enjoyed good bodily health.

During the first three days after his admission, he had all the

symptoms of a person labouring under a severe attack of delirium tremens.

He was excited, sleepless, turbulent; had hallucinations of vision, and would keep no clothing upon himself, excepting a blanket thrown over his head, or wrapped about his body. His tongue was tremulous, his pulse rapid.

After catharsis with cal. et jal., followed by compound cathartic pills, he took mass. ex hydrarg. gr. ij. t. d. and, subsequently, a portion of pulvis purgans. On the 23rd he was so much improved that he was permitted to be in the hall, and to go out of doors; and, on the 24th, he began to take a tonic vegetable infusion. He rapidly gained strength, and on the 29th the medicine was stopped. During this period there was a partial bewilderment in his aspect and manner. He was careless of his personal appearance, at times tore his clothing, and was otherwise mischievous. His appetite was now good. He generally ate voraciously, and required occasional purgatives. This was the only medical treatment to which he was subjected, with the exception that, a few days before his discharge, he took Fowler's solution gtt. v. t. d.

November 10th. For several days past he has uttered the most extravagant ideas. He now says he owns the Asylum premises, and is worth two hundred thousand billions of dollars. He also declares that he is the head of the Church throughout the world, and is going to turn the earth into a paradise, and manage it all himself.

11th. He went to the school-room and wrote a letter to his wife, from which the following extracts are made:—

"I am at the reading school and am one hundred times as smat as any of them they they are the greatest dunces in Eternity I shall commence travelling next week Please God and the first place I will go to is to my native own green Isle." "I would not trust the word no but the Oath of G. and Q. I wd not Trust them in an Empty room or a room full of Mill stones I am tak as many friends as go with me By their Paying Expences it wud not not mak much of a difference I shl have High life all over the continet and all the Corners in the World which I will make a Parridise of all the world and Have shepherds to take care of them so that has Plenty

Resp ful
C. — — —
Head of the C. Church
all over the world
C. — — —."

12th. The pupils are unequal, the right being the larger. There is an evident stammering in his speech, and general sensation is so obtuse that he can barely feel the most severe pinch.

He says he is worth ten times as much as John Jacob Astor. Being seen to make some strange gesticulations, he was asked what he was doing, and answered that he was blowing himself up; that he could blow himself so large that he would be thirty feet in height, or reduce himself to the size of twopence. On being requested to blow himself up, he put the end of the forefinger of each hand into the ear of the corresponding side, elevated his head, rolled his eyeballs as far up-

wards as possible, compressed his mouth, puffed up his cheeks with air, stretched himself upwards, standing upon tiptoe, and thus exerted himself until his body was in a general tremor. Upon being told that that was enough, he said, "Oh, that is nothing; I only went up to nine feet."

16th. He is endeavouring, with but little success, to sing; says he hears and sees music throughout his body, and can sing better than any man at the Italian opera. He asked for writing materials, for the purpose of "corresponding with all the different Governments on the subject of converting the world into a paradise." Being permitted in the afternoon to go to the school, he wrote a long letter to his wife. It was so badly written as to be almost illegible, and closed with a postscript consisting of two verses of pretended poetry, but so far as it could be deciphered, contained no rhyme and but little reason. From this time his delusions continued unchanged.

23rd. Sphincter of the bladder apparently paralysed. He says he can swell to the height of more than a hundred feet. He is very noisy at night; chews and swallows pieces of woollen rags, picks his clothes to pieces in the daytime, and empties the straw from his bed at night.

25th. He shuts his eyes, and says he sees "gold and all the brilliants in their shape and lustre manufactured;" says he weighs five hundred pounds, can run thirty miles in an hour, and walk twenty. He frequently "blows himself up;" attempts to sing, talks of his wealth and of his proposed conversion of the world into a paradise. He exhibits little or no interest in his relatives and friends.

On the 26th he fell into a state of coma, with very slight spasms of the limbs of the right side. This resisted the usual remedies for more than twelve hours, when he partially revived. He continued in bed, rarely speaking, and with but imperfect use of the right arm and leg, until the 29th, when he was removed from the asylum, and died at home on the following day.

No autopsy.

The subjoined is the most remarkable case of the kind that has ever fallen under my observation. It is the only case of recovery from the partial-general paralysis that I have ever known, and the second of which I have ever heard as occurring in this country. Mr. Calmeil, who first minutely described the disease, and who had for more than twenty years been connected with the Hospital for the Insane at Charenton, near Paris, where hundreds, perhaps thousands, of cases had been treated by him, informed me, in 1849, that he had never known a case of complete recovery. He had had patients who improved sufficiently to return to their homes, and, in some instances, to pursue their occupations, but in every one of them the disease had resumed its course.

CASE IV.—Mr. — was a native and resident of one of the interior counties of the State of New York. He was of medium stature, with brown hair, grey eyes, and lymphatico-nervo-sanguine tempera-

ment. His constitution was strong; his intellect above mediocrity. After pursuing a classical course of study, he read and practised law, and became eminent in his profession. He was married at the age of thirty-four years. Although not intemperate, according to the common acceptation of the term, yet it was said that he "liked good living, and indulged freely in the luxuries of the table." One of his paternal uncles was insane, and a maternal aunt was affected with melancholia.

In August, 1847, he was much afflicted by the death of a favourite child; and in September, having involved himself in pecuniary difficulties, he became melancholy. In the early part of 1848 he had an epileptiform fit, which was followed by another upon the same day, and, subsequently, by several others. It was said, however, by his friends, that previously to this his speech had become defective, and the muscles of his arms so much impaired in their action that he was unable to write. His disease continued gradually but slowly to progress, and for some time he was under the care of the local physicians. On the 30th of July, 1848, at the age of forty-two years, he was received into the Bloomingdale Asylum.

At the time of admission he was much excited, constantly in motion, walking to and fro, talking incessantly and incoherently, mostly upon pecuniary matters. He wanted to go to Wall-street, where he said he would purchase \$35,000 worth of railroad stock, and make a great speculation. He spoke rapidly, but frequently dropped a syllable, and sometimes hesitated, from inability to utter a word. The pupils were contracted, but of equal size; tongue furred; pulse somewhat accelerated. After the administration of a dose of pulvis purgans, he was put upon the use of twenty drops of antimonial wine, with ten drops of the tincture of digitalis, three times daily.

31st. He is still much excited, shouting that he wishes to get out of the house and go to Wall-street. His speech is more imperfect than it was yesterday. No evacuation of the bowels. R.—Cal. et jal. aa grs. x.

August 1st. There having been but a slight alvine movement, another portion of pulvis purgans was administered. This produced free catharsis, and his excitement was considerably subdued.

6th. The pupil of his left eye is larger than that of the right, and there is an evident partial paralysis of all his limbs.

11th. His excitement has almost entirely subsided, and the paralysis has so far increased that he cannot walk without support. Stop the vin. ant. and tinct. digital., and give a tonic vegetable infusion three times daily.

14th. His ideas of wealth, of station, and of power have been constantly increasing since his admission. He now says that he began business with a borrowed capital of three hundred dollars, and from that has accumulated a fortune of five millions; that in the town of Oswego he has one hundred and fifty mills, each containing five runs of stone, and the whole turning out twenty-five thousand barrels of flour each week; that a million of dollars has been cleared by this operation; that he has seven ships at sea—four of them on whaling voyages, two bound to China for cargoes of tea, and one to the Medi-

terrestrial for fruit; that he has purchased the whole of the United States, except New York and Philadelphia, together with the wheat lands in Canada, and the whole of Mexico, for all of which he paid but one million of dollars; that he owns two coal-mines, one in Virginia and the other in Mexico, all the copper-mines in Wisconsin, one gold-mine in Africa, all of those in Mexico, as well as all other mines of gold and of iron, and that his income from each of these mines is seventy thousand dollars in three weeks; that among the rest of his property are—1, the Bank of Milwaukee, with a capital of three hundred thousand dollars; 2, three hundred thousand dollars invested at twelve per cent. interest in New York; 3, stock to the value of five and a half millions in the Hudson River Railroad; 4, a factory in one of the towns upon the Hudson River; and that he is about to establish a bank in New York, with a capital of two millions of dollars.

He asserts that he is a Judge of the Supreme Court of the State of New York, and a member elect of the next Congress; that he is to be appointed minister to England; and that he shall be elected as the next Governor of the State, and the next President of the United States after General Taylor. He proposes to start, to-morrow, on a tour to the Catskill Mountain House, the Thousand Islands, Quebec, Montreal, Oswego, Falls of Niagara, Ohio, Washington, Florida, Mexico, and Buenos Ayres, returning by the way of Mexico, Mississippi, Illinois, and Oregon. This journey, he thinks, will occupy his time for four weeks. He intends, after it is completed, to start for Europe, and spend two years in England, two in France, one in Switzerland, one in Germany, one in Sweden, three in Russia, one in Norway, one in Turkey—in Constantinople—"Con-con-stan-no-nople," as his impaired enunciation makes it), and one week in Africa, making, in all, eighteen years. He proposes to take his wife and children to Russia with him, in a steamer of one thousand tons burthen, which he will have built expressly for the purpose, and named for himself and wife. He will freight it homeward with English goods, which will yield a profit of \$100,000. On its second voyage, he intends to return and to build twenty houses, at a cost of \$10,000 each, on one of the docks in New York.

17th. His general sensation is obtuse; his taste imperfect. A portion of the sulphate of magnesia being prescribed for him, it was made to a strong solution, which he drank, saying that it was "first-rate magnesium water."

21st. The paralysis has extended to the sphincters of the bladder and rectum. The patient's speech is variable, being much more imperfect upon some days than upon others. His memory of recent events is almost entirely destroyed. He says that he has invited several guests, among whom are God and Van Buren, to dinner; and that one of his whaling vessels arrived yesterday with twelve hundred barrels of oil, upon which he will make a nett profit of fifty thousands of dollars. On being informed of the recent destructive fire in Albany, he remarked that he did not "own any of the buildings that were burned, except the Eagle Hotel, the Mansion House, the Townsend House, and the Odeon, which are all insured for their full value." He added, that he has "bought all the land of the burned district, and is

going to build it up with marble;" and that he will "immediately give one hundred dollars to the sufferers, and fifty thousand by-and-bye."

There are many sores upon different parts of his body, some of which apparently having arisen without any external cause, and others the result of ulceration of places upon which the skin was abraded in the course of his period of high excitement. Attempting to write his name, his hand is unsteady, moving by partial jerks; and although one of the letters are pretty accurately made, others are very imperfect. Several are entirely omitted, and there are some unmeaning insertions. It takes him probably five times as long to write it as it did before this disease. On the second attempt he is somewhat more successful, but his writing is no better than that of a child in his first essay, and is a connected fine-hand copy.

September 1. The left pupil is larger than the right; but both are contracted.

3rd. He says he is worth ten millions of dollars; that the Lord has come down to him; that he is now sixty-five years old, but the Lord will make him only twenty-five.

5th. Besides his fanciful ideas of wealth, he now has many religious delusions. He often calls himself a bishop, or a clergyman, and says that he is going to preach in Trinity Church.

17th. He says that God is up in the room, on his throne, and is about to preach to-day; asks us to go up and see him. A seton was then inserted in the back of the neck.

18th. He talked as follows: "I went up to God one day, and asked Him, 'God, what is the reason that — and — are in hell?' His answer was, 'They are not in the right line of succession within the church.' 'Well,' says I, 'what does the devil do with them when they are first put in there?' He said they were first ground with fire and red-hot iron; afterwards they were ground down with spirits of turpentine and saltpetre. Don't you think that will make them smart?" He then proceeded to give an account of his own life, and concluded by saying that he was the most eloquent lawyer in the world.

27th. His pulse is always rapid. It is now 124 per minute, and regular; pupils nearly equal, tongue slightly coated, bowels regular, the sphincters under voluntary control, general sensation less than it has been. He writes better than he did, and can stand, but cannot walk without assistance. Being asked how much money he was worth, he answered, "Nine hundred thousand dollars," at the next moment, and then added, "No; God says it is ten millions. I made ten thousand four hundred dollars while you have been here; and I own a million dollars' worth of jewels." He then said that he goes up to Heaven to see his father, and offered to take his mother up with him.

The seton produced a considerable discharge throughout the month. The tonic infusion was stopped in the early part of October, and was followed, through a large part of the month, by alterative doses of bichloride of mercury. Under this treatment the discharge fr

seton almost entirely ceased, most of the sores upon the body healed, and the appetite and digestion of the patient continued to be pretty good. In the latter part of the month he was attacked with diarrhoea, which was subdued by opiates. All the characteristic symptoms of the paralytic insanity varied from day to day, but subsequently to the 27th of September the patient was not at any time better than upon that day. The general character of his delusions remained unchanged. At one time he enumerated the different offices of which he imagined himself to be the acting incumbent. Among them were the presidencies of several banks, insurance offices, and railroads; a number of bishoprics; offices under the national government, &c. &c. He made the aggregate salaries \$76,000 per annum.

On the 3rd of November, 1848, the patient was removed from the Bloomingdale Asylum to Dr. Macdonald's private institution, at Flushing. There, after a residence of some time, he began to amend, and at the end of a few months was discharged, recovered. Dr. Macdonald died soon afterwards, and I had no opportunity of conversing with him in regard to this very remarkable case. I am informed, however, by Dr. Benjamin Ogden, that no special treatment was pursued which was supposed to have effected a cure, but that Dr. M. attributed the patient's recovery solely to an effort of Nature.

This gentleman is still living. He is in excellent health, both physical and mental, and is engaged in an extensive and successful business.

In the following case, the symptoms, not only in its earlier periods, but along its course, were such as to lead the experienced observer to the prognosis of paralysis; and yet, although the progress of the disease was comparatively slow, and although some of the other most peculiar characteristics of the partial or general paralysis were present, the paralysis itself never appeared:—

CASE V.—Mr. —, a native of the interior of New York, was of medium stature. He had brown hair, grey eyes, and bilious-nervous temperament, the nervous greatly predominating. His talents were fair, and he received a good common education. He was active, intelligent, and of mild disposition, though excitable. His mother once had an attack of insanity. He entered into business, and when quite young accumulated great wealth by speculating in real estate during the years 1835 and 1836. This fortune, however, he subsequently lost; and afterwards engaged in various kinds of business. He was married and had children. In the winter of 1845-46 he came to the city of New York, in the hope of finding employment. Soon after his arrival, his friends perceived that he was eccentric, wilful, and easily excited; more than usually talkative; self-complacent when speaking of his business capacity, and elated with great hopes for the future. These symptoms increased. He began to make imprudent purchases; gave away his money, lost sleep, and grew more and more excited until the 23rd of February, 1846, when, at the age of thirty-six years, he

was brought to the Bloomingdale Asylum. His friends stated that he had had a cough ever since the preceding summer.

State when admitted.—Emaciated, somewhat sallow; pupils natural, tongue slightly furred, bowels costive, pulse 110. He is restless, and very talkative, but shows no disposition to be violent. He consents to remain, but thinks that "placing a man, so well as he is, in a Lunatic Asylum, is one of the most ridiculous farces ever imagined." His general conversation is quite rational, and no attempt is made to elicit his exalted ideas. Before his friends leave, however, he in great good-humour takes some papers from his hat, and requests the doctor to look at some poetry which he has this day been writing. The paper contains six stanzas, the first three of which he says were written by his favourite author, Mr. Tupper. The others are a parody upon them composed by himself. After reading these lines, and hearing a history of his case, I told his friends that I thought there was but little hope of his recovery.

February 24th. R.—Blue mass. gr. ij. t. d., with an aloetic pill morning and evening.

March 1. Skin more natural, and he looks less worn; tongue clean, appetite and digestion good. Stop mass. and pill. R.—Tinct. opūgtt. x. t. d.

4th. Bears the opiate well; sleeps sufficiently. Increase tinct. opū.

Four days after admission he wrote a letter in reference to some mineral lands to a gentleman in the northern part of the State, with whom he was entirely unacquainted, requesting him to take men and teams to those lands, procure one or two thousand barrels or boxes of all kinds of minerals, and send them to him in New York; stating, furthermore, that if the said gentleman had not money enough to accomplish this object, he might draw upon him. He then proceeds, by way of introducing himself to the stranger to whom this letter is directed, to give a genealogical history of himself and of his wife. He says, that if the minerals should prove to be rich and the lands valuable, the county in which they are situated will become more populous. "We will," says he, "put a bank at your place or in Peru, and it would be a good place for a college for the north of this State, better calculated than any in the State now; for it might be used for the poor of the State, as well as those who could handsomely pay. I speak of this as an inclination, and not anything which would trouble me at all if it should not be worth anything. And as to the sum to be paid to the noble man, the owner of the farm, the soldier of the great Revolution—why, I think I would not feel a sigh to pay him \$200 a year as long as he lives, without any interest at all, if it would do him good, for I feel perfectly well off, and it would give me much pleasure and contentment to do such a thing."

About the time of the date of the foregoing communication, after reading the advertisements of several valuable houses that were to let in the city of New York, he wrote to the owners, advising them to furnish the houses, as they would then rent more profitably than if unfurnished, and made some preliminary propositions in regard to hiring them. He subsequently wrote the following letter:—

"NEW YORK, March 20, 1846.

TO THE HON. DANIEL WEBSTER.

"Sir,—As a stranger, and having some business to have done at Washington, which I know to be of great importance to me, if not to our country. . . . For three years I have known what I now write, yet have said nothing; but now, as the great and good men of both parties, conservatives, are all together, thought it of great importance; and it is this: That by using the bright sands of the sea-coast, and the small, round, clean stones, or other hard materials, with water-lime, you can make a road from here to the upper part of the region, in a month, or less; because water-lime, mixed with clean stone or sand, or anything solid, will make a road much better than a railroad. So far as a month, for instance, make it soft and mix it clean, and throw it upon the ground as far as you choose, and make it smooth, and, as soon as it is dry, it is, in my opinion, harder than rock. And should the great men of our great democratic nation, now altogether to do right, believe surely, as I do, that, in one day, I could, with that mixture, by the aid of good builders, make one hundred ships a day. And now, suppose a ship was planned large enough to carry thousands. Make it three feet thick and one hundred feet wide, and flat at the bottom, having large places all along its side or bottom, to take it up if necessary, and put down again. Well, it would require no ballast; and round the sides, from the bottom to the top, and while it is soft, at the bottom fix a rail, as low as profitable, that can at any time be hauled up for other purposes; such a ship, in my opinion, would draw but little. And, as far as war was concerned, no common shot or ball could hurt any one; for it is a rock, smooth, and the balls would slide under. Now, build as many as you please, in a month, and put them together, and in two or three days they could reach England, and everything upon the ocean could be taken without trouble, or anything else. The reason they would, in my opinion, go so fast, is that they would draw no water, laying so flat, with a deep tiller, if it would be thought right, and with engines of the screw to give them their power; when they were wanted for something else, it would be well to have the engine screw put in the bottom, so that you could bring it within the ship, and have rollers under, which would cross any land one hundred feet wide; and make a railroad or road of hard rock, and as fast as the stuff could be thrown out (I mean the sand-lime and stone), the engine within would roll the rollers under the ship, and make the road smooth and ready for use as soon as it was dry. And, before it was dry, the same material would make a fence as high as would be necessary for anything, by sticking them down when wet. Carriages, and everything, almost, could be made, and will be, and buildings (safe from all fire) which now cost so much, could be built by my patent for a little. Now, in my opinion, should it be thought right, and above all question, in my opinion England could be made a state of this Union, and all Europe, and this hemisphere, and the whole world, could easily be made one democratic kingdom. And now it is useless for me to say more at present. I have wished to be secured in the Patent Office for this matter for all time. All I have acted upon was a trial in digging a hole for a post, and putting it in, and throwing in this material, and it became stone. If such an arrangement could be made with our great men, say H. C. C., the Secretary of State, Mr. A., and the best in Washington, why, I think, without spilling any blood, an arrangement might be made with England, letting them have their titles they now have, and making them and their great men only as farces, our own great men to rule the world. I believe it was Napoleon who said, before thirty years, that Europe would be democratic or Russian. Now, I have been reading the great argument of Senator Sumner upon our position with Great Britain—wonderfully correct, and, with one exception, true. But he thinks to possess Mexico. It would cost millions. Why, it is all wrong, for it would cost nothing to speak about. If it would

be allowed by our Union for a man to undertake the control of Mexico on his own account, I am sure it could be done in a month, and could be done without asking a cent from the country. I would begin a road with my mixture at Washington, *via* New Orleans, and, at the same time, make arrangements with the wire telegraph to use it under ground instead of above, for the use of the Government. There would be no hindrance from water or land in running such a road through to Mexico, with such a fence that few could get over on each side of it, and no guns could hurt or shatter the machine or ships. No blood would be spilt, but all taken.

"Now, not to let it be known that ships and other things are made in this way, it would be extremely necessary that the patent should be concealed, and the ships covered with sheet iron, and call them iron ships. And as to Canada and New Brunswick, it would be all the same, and I truly believe, if the question was placed by the great men of this country at England, with our ships in sight, that they would be satisfied to become part of our Government, and in doing this without much trouble. It would insure unto the United States the government of the whole world, making it democratic, or allowing the great men of their country to join with ours in the government; and it would be a wonderful affair in respect to the religion of our Maker, for now the news of the arrival from Europe is, that England is now at war in the East, and many thousands have been killed lately; and now is the time to put a stop to this business. If I am right in my idea of the great and wonderful power our Maker has given to this country, no argument, in my opinion, can be made which can be a conviction of truth against this: that the United States should do her most to gain the control of all they can, simply for the defence of their own liberty, and the liberty of the whole world.

"I shall say no more at present, but, at all events, as soon as you get this patented for me, and if you think I am wrong in my ideas of *right*, why keep this a secret, and return it to me. I would have no man see it, if your opinion is against it, as far as the Government is concerned.

"Yours, respectfully, — — —.

"P.S.—Show this to Calhoun, and let me hear from you immediately."

He wrote several letters to his wife. The following extracts are made from one of them:—

"My happiest moment in life is now, I am well beyond all question, and healthier than I ever was before.

"I am so well that I have grown so strong and healthy that you would hardly know me. I was measured yesterday and found myself at least six feet high with boots on, my whole body looks as straight as it could be, and I cannot alter it. I feel great in my power which has been given to me by my Maker, for there is nothing I can not do in business and the following year will test the question. . . . I can write any thing, poetry, argument, and can sing as well as I wish, and sing without knowing any thing, but with my ear, when I get through this I will give you a happy song, of three or four verses which I think will be suitable to the occasion. I have written to W— upon country matters. . . . I can follow Tupper and I think I can do what he has done. . . .

"And now to thro' off all nonsense I will write a few verses as I said I would

"Dear blessed sweet — a dear Queen
Always so beautiful, as the sun shining
Upon the Earth which our Maker, green
Has given to you and to me, rising.
Upon this wonderful world beautifully seen

With our eyes beautifully shining, devising
 Our word of the great truth, upon which we lean
 Given by the Lamb of our Maker so, rising
 Above the great world, by our Redeemer's will,
 That you and me, with holy thoughts, sighing
 Away our delightful selves, so still
 To our Redeemers; wonderful rising
 From death, to his everlasting good
 Which wakes you dearest, and your loving —.
 In this beautiful world our hearts always good,
 To Our Redeemer, which always will make us
 Nature Nobleman, and qucan with our
 Dear blessed hearts in one hand, in one hand."

May 29th. He has gained much flesh; his appetite, digestion, and general health are very good, and there appears to be no indication for further medical treatment.

From the time of his admission his restlessness and excitement have gradually subsided. He is perfectly calm; and a stranger, in a short conversation with him, might not perceive anything peculiar. To those around him, however, he frequently enlarges upon his magnificent schemes. He imagines that he has more talent and skill in everything than any other man. In literature, particularly, he believes no one to be his equal. He really plays skillfully at cards and ninepins, but is irritated at the least opposition.

After this he continued very slowly to improve, although he was subjected to no further medical treatment. He had the liberty of the premises, upon parole, and passed much of his time, during the summer, sitting or lying in the shade, reading. He less and less frequently alluded to his extravagant notions, and throughout most of the winter could not be induced either to speak or write anything in reference to them. It was believed, however, that he still secretly entertained some of them; and a degree of self-complacency was still exhibited. In the course of the winter he did considerable writing for the officers of the institution, copying documents in a good, legible, and firm hand.

Discharged, much improved, January 2, 1847. He went to his home. About two months afterwards he called at the asylum, and appeared to be in nearly the same condition as when he was discharged. He now attempted to obtain employment in the city, but his friends were obliged to send him again to the country, as he was considered unfit for business. On the 20th of May, 1847, he was taken, handcuffed, to the Utica Asylum. For a time he was excited and somewhat destructive. His ideas were exalted, and in the daytime he was almost constantly in motion. He said he was going to be President of the United States; that he owned the State of New York, and was going to plough it all with a plough made of cement. He pretended to communicate with his wife and with the Government, by telegraphic dispatches. He thought his food was poisoned, and, at length, refused to eat, so that it became necessary to feed him. There was no evident defect in his speech or gait. In the autumn he became more calm, and joined others in playing cards; but even in his best condi-

tion, if he was alone, he was constantly walking to and fro, rubbing his hands, and pretending to be making worlds.

After a few weeks he became more excited, and it was necessary to confine him in a darkened room, and, at length, to his bed. Here, during the day, he still talked almost incessantly—the making of worlds being a prevailing topic. In the winter he had an attack of cerebral congestion, unaccompanied by spasms. He roused from the immediate effects of this, but his mind was much more impaired than before. Afterwards he had illusions and delusions simulating those of delirium tremens. He imagined that he saw devils, and struggled in encounters with them.

During the last few weeks of his life it became necessary to feed him, and his bowels were moved only under the effect of powerful cathartics. He was emaciated and ghastly, and his mental faculties almost entirely prostrate. He died on May 2nd, 1848.

The principal pathological appearances of the brain were as follows:—Thickening and opacity of the arachnoid pretty general; blood-vessels enlarged; pia mater much injected; about four ounces of serum in the cranial cavity; substance of the brain generally softened.

In the autumn of 1848, I was requested by Dr. H. D. Bulley to see a patient, then under his medical care at the New York Hospital, some of the symptoms of whose case were very similar to those of the partial-general paralysis. The man died soon afterwards, and Dr. J. B. Arden, formerly one of the house-physicians of the hospital, furnished me with the following brief history of the case:—

D ———, æt. thirty-three years, resident of New York, boatman. About six months ago the patient had a slight apoplectic attack, from which he so far recovered as to be able to walk about in three or four weeks; but he has never completely recovered the faculties of his mind. He has lost his memory, and the ability to recall the appropriate names of objects. He has not complete control over his lower extremities; walks with difficulty and unsteadiness; does not complain of pain in the head. The pupil of the left eye is much the more dilated, but is slightly acted upon by light. General health good.

Nov. 2nd. Patient remains about the same; has no pains; walks about the hall with the aid of a stick.

Dec. 4th. Patient last night had an apoplectic attack, with tonic convulsions, and in about six hours died.

Autopsy, eighteen hours after death.—On opening the cavity of the cranium, there was found a large effusion of blood under the arachnoid membrane, and around the medulla oblongata. The lateral and fourth ventricles were filled with fluid blood, in which were some coagula. There was no marked softening of the brain. The right vertebral and the basilar arteries presented an appearance resembling a varicose vein, or like a string of beads; in other words, there was aneurism of these vessels. The basilar artery was, in one point, as large as a pea, and this enlargement was situated under the pons Varolii. Other organs healthy, as far as examined.

ART. V.—AN AUTOBIOGRAPHICAL SKETCH OF A DRUNKARD.

WITH truth I may call myself a drunkard from my mother's womb. On November 20th, 1803, after a long and severe labour on the part of my mother, I was brought into existence, some twenty minutes previous to which, my mother, taking advantage of the absence of her accoucheur, got out of bed, and, impelled by an uncontrollable desire, took from the cupboard a bottle of brandy, of the contents of which she swallowed a large wineglass.* Now, this act, at such a time, for a woman fond of or addicted to drinking, would not have been considered extraordinary; but for one of her well-known abstemious habits, who had, probably, never before tasted undiluted spirits, could only be accounted for from that morbid and depraved taste which sometimes prevails with the sex on like occasions. However, such act was the prelude to my after-existence. Now, whether the same cause that produces diseases such as gout, stone, consumption, and various other maladies to which suffering humanity is liable, traceable in descendants to their parents, acted so on me in producing that predilection for alcoholic drinks or not, I will leave to the physiologist and curious in such matters to determine.

I will now begin briefly to relate the chequered events that have befallen the poor inebriate, up to the time that the grace of God changed his career, I hope permanently, by means of the truth promulgated through the doctrines of teetotalism, together with the mysterious revelations of the punishment awaiting the drunkard in the kingdom of darkness, when he goes hence.

Soon after my birth, as my mother's health did not permit of her nursing me, I was given to a person living some eight miles from the place of my nativity, whose house was situated in the midst of a forest of exquisite rural and sylvan beauty. Many years since have I gone to review its romantic scenery, and endeavour to realize the ideas and feelings and reminiscences of my early days;† brought to remembrance the gipsies' camp—the shrinking, half afraid, from the extended hand of the old gipsy, as she took the jug of milk, and kissed the averted cheek of the little curly-headed child, held in the arms of the kind-hearted foster-parent, who always supplied this luxury to these

* The communication of this fact I heard made to a female friend by my mother, whilst contemplating me as I lay in a half-drunken, half-sleeping state on some stairs.

† Those in age, who recollect the tenacity of their very early childhood impressions, will not discredit this assertion.

people, when periodically encamped under their old favourite beech-tree, which they always selected under which to rendezvous at certain seasons of the year. At such times, many a maiden coy and bashful swain were wont, at evening's close, by crossing with silver the sybil mother's palm, to elicit from her the coming destiny of weal or woe that lay in wait on their further path through life. Driven by the necessity their rambling life enjoined, one bright trait redeemed the deception of half its sin—the magic skein unravelled, no future fate foretold, that brought to the maiden's cheek the blush of shame, or dimmed with fear of sorrow her sparkling eye; half doubting, yet hoping that the tale was true, a laughing pleasure beamed from her joyous face, that partly realized the anticipated bliss. Ah! happy days of inexperienced boyhood—no more amid the stern realities of life shall such like scenes return! How, alas! they contrast with the years of sin and folly, and followers in their train—sorrow and remorse—that since have beset my path; and I cannot but here repeat the prayer that spontaneously burst forth, on the first conviction of sin, in early days:—"O, Virtue! would I had ne'er swerved from thee, thou goddess whose bright smiles do cheer the weary sojourner on earth, making his rough way smooth. But now, thy rival, Vice, clinging as serpent's coil, in soft and slippery folds, by his close grasp unhinging all the nobler faculties; and the seeds, O, Virtue! thou didst sow, are, in embryo, just bursting, crushed by the pressure."

But to resume my narrative. After remaining at my dear old nurse's till about six years old, I recollect, one evening of a beautiful day of summer, a post-chaise being driven up to the wicket-gate of the little farm, and a lady getting out that I had been told to call mother, but whom I had so seldom seen that I could hardly reconcile to myself that it was right to call her by that endearing name, in the stead of my dear old nurse, who had shown all a mother's love to me. I was immediately got ready, and in the midst of bewailings and tears, left my foster-parents' roof, no longer to be a home to me. There was one circumstance in her—my nurse's—habits of life, which here I must not omit to mention, from its singularity—in contradistinction to my after habits of life—and that was, she never drank any beverage but tea or water. No power on earth could make her partake of any alcoholic drink; she did not like it; she had a natural aversion to anything of the sort from her infancy. She took no merit for herself for her abstinence; and "total abstinence," as a moral virtue and enjoined practice, was then unknown. Her husband, a small farmer, on the contrary, often came staggering home in his cups from market, and she, woman-like, did not fail to scold him the next morning for his irregularity.

in a few days, under the caresses and kind treatment of my mother, I became perfectly reconciled to my new home; I never sorrowed for the absent. There was one little novelty, I recollect, which tended much to reconcile me to the change, and that was, the fine trappings my father occasionally wore as sergeant in the Yeomanry Cavalry, at that time in constant requisition, apprehending an invasion by Bonaparte—a name fraught with terror to my young ears. Many curious tales of those days, after-years I recollect being told, about certain individuals of the troop showing the “white feather” on a certain night, when called to horse with the formidable announcement of the French being in sight—information derived from the lighting of the red signal-fires on the neighbouring heights. The few large vessels in the Channel which gave rise to all this commotion, ended, at last, to have been only some of our “merchantmen.” One gallant soldier was suddenly seized with the gout; a second scalded his leg; a third, his horse was suddenly taken from him;—for which excuses, I need hardly say, they had to bear the ridicule of their townsmen for some years after. But to proceed from this digression. In due time I was sent to school; after five or six years of plain education, learning land-measuring and other essentials, to fit me for what I was then intended—a farmer—I left school a hopeful lad, possessing the good will and good wishes of my master, and all who were acquainted with me. There was, I recollect, in those early days, one trait in my character which, from what I have hereafter to relate, will be considered in me vanity now to mention, and that was, a love of truth. I was never known to tell a wilful lie. My parents were not, strictly speaking, religious people. I was sent to my school, taught the catechism, and, at the proper time, confirmed; but the sin of telling a lie had been so particularly impressed on my mind, that that sin I was rarely guilty of; and even to this day that early impression, in the midst of all the complicated temptations which follow in the wake of the drunkard's career, has been respected, and the sin held in abhorrence from that early connection. From this I have often thought how necessary for parents and guardians of youth, or rather children—particularly the young mind at that early age is fitted for receiving and retaining impressions of what is good and evil—how urgently should be inculcated in their young minds a hatred of all sin, as an offence against a pure and holy God. If such practice more generally prevailed in the teaching of little ones, I am satisfied, from my own experience, howsoever in the heyday of youth and folly such evil actions may be forgotten, that the time will arrive in God's providence when the seed so sown shall revive, and bring forth unto repentance.

On leaving school, I commenced my duties on the farm, during which, manhood began to dawn upon me. At this time, one particular occupation, at which I was occasionally engaged, tended to increase my love for "that accursed thing which worketh abomination,"—"that vial of wrath," mentioned in the Book of Revelations, "that should be poured out upon the earth,"—"that produce of the vine of Sodom and Gomorrah,"—"that poison of dragons and the evil venoms of asps," which biteth like an adder and stingeth like a serpent,—“that abomination that maketh desolate.” This occupation was the driving of post-horses; for, in addition to my father's business of a farmer, he united that of a postmaster, and frequently, when the regular drivers were out, I was found very useful in taking a pair of the remaining horses, and executing any order that might come in. This accelerated my progress to becoming a confirmed lover of strong drink. Being naturally good-natured, and not wishing to show on such occasions that I felt myself above the menial duties I was employed in, I was led, unhesitatingly, to accept the contents of the proffered glass. From this date, and from this cause, I reckon my gradual progress to ruin. This alternate employment continued till my twenty-second year, when my father took possession of an additional farm, a few miles from the town in which he lived, intending, after realizing a partial return of the capital used in stocking the farm, to give it into my hands. In the meantime I was, under his jurisdiction, to manage the business, my remuneration for which was to be the produce of a dairy of eight cows, piggery, poultry, and other advantages, together with the farm-house to reside in, free of rent. I had not been thus settled more than a year, when I formed an attachment for the daughter of a farmer retired from business, whom, after years of wooing, I married, looking forward at that time to many years of peace and happiness from the affection of an amiable and beloved wife, whose excellent disposition and domestic acquirements were well qualified to give a home that charm which, to one of regular habits and well-formed mind, could not fail to be appreciated.

I mentioned before, that I had always been brought up in a belief in the doctrines inculcated by the "Episcopal Church of England," and revered her formularies,—sitting under a minister of good moral habits, but, in his preaching, advancing very little of that evangelical *life-saving truth* which, I thank God, now more commonly prevails with the ministers of the "Establishment." In those days, when the truth as it is in Jesus was preached in all its faithfulness by a Church of England minister, he was branded, forsooth, as a "Methodist,"—intended as a term of reproach,—and many of his congregation, particularly among

the higher circles, would, on his ascending the pulpit after the prayers, abruptly leave the sacred edifice. Of this I had ocular demonstration, shown to the person of a reverend gentleman who, in consequence of this treatment, together with a slight change of views, seceded from the Church, and afterwards became a popular Baptist minister, dispensing the bread of life to a large congregation in the metropolis; and but very recently deceased.* About this time I accidentally heard a young man, an intended missionary for Persia, who had previously been carrying on business as a chemist, the power of whose preaching was such, that by God's blessing a great impression was made on my own and wife's mind;—on hers, thanks be to God, a permanent one; mine, the sequel of my history will show. After this, my old church minister seemed to have no life in him. I in vain listened for those quickening truths, the faithful preaching of which makes the Saviour all in all to the poor sinner, and by whom *alone* cometh salvation; but, alas! too much dependence on creature righteousness was preached, and too little seeking for God's grace, by the gift of his Holy Spirit, to will in you to work and to do his good pleasure, was his characteristic. The impression made at this time has never been entirely obliterated, notwithstanding the assaults of the "wicked one" have triumphed for a time in bringing me under subjection to his will. Thanks be to God; he has always in his mercy made my sins my reprovers, by using them in the last extremity to bring me to a conviction of the heinousness of their nature, in contradistinction to the emanations from a pure and holy God, whose pervading influence constrains the sinner to seek pardon by pleading a Saviour's atoning blood, the imputation of his righteousness, the sanctification of the third person in the Trinity, the Holy Ghost, imparting to me his spirit to love holiness and hate sin.† In looking back at the serious convictions of my past life, evanescent though they were, I can clearly see that God's grace was never withdrawn from me, nor will be from any convinced sinner, till he ceases to employ the means that God has provided for the preserving of that gift,—the ceasing to pray, and the keeping from attending that place in which he has said, "where two or three are gathered together, that he will be in the midst of them."

At this time, having nothing more to do with driving, I had, humanly speaking, a good opportunity to divest myself of that

* The late Rev. T. Evans, minister of John-street Chapel, Bedford-row, and succeeded in the ministry by the Rev. Baptist Noel. Many years since, the Rev. Mr. Evans was officiating clergyman at Milford, near Lymington, Hants.

† It must be understood that these were the doctrinal points in which I believed, and had convictions, at the time these incidents occurred. I by no means identify myself with the whole of them at the present day.—Sept. 8, 1868.

baneful habit, indulgence in strong drink, and did make many strong efforts for that purpose. But such resolutions, being based on my own creature strength, lasted but a short time; the temptation that beset me at the evening meeting, after the farmers' weekly market in the neighbouring town, proved too great for my weak resolves, and after a short interregnum of sobriety, I seldom arrived home from them perfectly sober. This went on amid repeated resolutions of amendment and relapses, till the third year of my occupancy of the farm, when, from the great and sudden depreciation in the value of agricultural produce, farmers of small capital were, of course, injuriously affected—their rent, on lease, having been fixed on an average of prices when corn realized double the amount, brought many a farmer to ruin, or to emigration, with the fragment of his property that remained. This so far affected my father's circumstances, as, instead of giving me possession of the farm, as he had previously intended, obliged him to throw up the remainder of his unexpired term into the hands of his landlord; so that no resource now seemed left to me for the maintenance of my wife and increasing family, but a return in some way to that sort of employment into which I had formerly been initiated,—to which no insurmountable difficulty presented itself, from my father still continuing the posting business, enabling him, by horsing a not very profitable coach, to procure for me the situation of a stage coachman on *another coach*, on a more profitable line of road,—the losses that he sustained by horsing one being considered as a sort of premium for the lucrative situation that I held on the other. This took place in 1831-2, and I now had a prospect before me, with moderate carefulness, of realizing a very comfortable living, and of providing for the exigencies of the future—my situation realizing four and five pounds per week. This post I continued to fill without accident for two years, when an event took place which was the indirect means of bringing me to a stand-still—that was, the death of my father; the direct cause of which, although the relation will form a short episode in my narrative, may not be thought out of place here to mention. The before-mentioned causes, which produced the necessitous circumstances which drove my father to leave the farm—a business to which he was devotedly attached—produced, from continually brooding on his loss, a weakness of mind bordering on aberration of intellect, from which he was just recovering when an election of a member of Parliament, for the borough he resided in, took place,—when, the usual dinner on such occasions being given, he, with the other *immaculate, independent voters*, was invited, that indulgence in their gourmand propensities and powers of imbibition, might render less keen their talents for entering the political arena, for the purpose of dis-

cussing the principles of him whom they were about to invest with the authority of their representative.

He came home from the *feast* in good time, his usual moderate habits and consideration of his recent illness, no doubt, preventing him from undue indulgence, and from the too common excesses committed on like occasions. Would that the same caution had been observed on the second day, when the party met for the purpose of *lunch*, or rather for that of consuming the fragments that remained. The very little that my father had drunk the preceding day being more than on ordinary occasions, produced—as the *use* of intoxicating drinks always does—that depression of the feelings which nothing but a return to the cause of the evil seems to give a transitory relief; the consequence was, his being brought home late at night by a good-natured, half-reeling friend, and laid powerless on the floor of the parlour. This ultimately produced paralysis in certain bodily functions, and in eight days from this—the day of enjoyment—death released him from his sufferings, of which event I was the next morning apprised, by a person sent to relieve me from my duties on the coach I was driving, so that I might be enabled to hasten to my mother and family, to join and sympathize with them in their affliction.

* * * * *

After the funeral, my late father's affairs were investigated, and found to be in that state which left hardly sufficient, after his creditors were satisfied, to enable my mother to carry on the *posting* business for the maintenance of herself and the junior branches of the family. This induced (my late father having been an old and respected inhabitant of the town for upwards of thirty years) the influential inhabitants of the neighbourhood to raise a subscription in her behalf, for the purpose of relieving her temporary difficulties, and more permanently fixing her in the business in which she had heretofore been engaged. This having been accomplished, matters proceeded in their usual course until the executors of my late father, finding that the coach before-mentioned, which had continued to be horsed for my benefit, was such a losing concern, that they were compelled, in justice to the junior branches of the family, to give notice of its discontinuance. The consequence was, the proprietor having no longer self-interested motives to induce him to continue me in his employ, very shortly afterwards took advantage (which I am sorry to say that I too frequently gave him) of my occasional fits of intemperance to remove me from my situation. I should have soon been reduced to great extremity, but for the kind individuals who had already so materially assisted my mother; they thought me severely treated, and got up a further subscription

towards establishing a coach, that should leave the town at a later and more convenient hour, as a feeder or branch of the coach which left a large town eighteen miles distance for the metropolis, at about mid-day, to which situation I was duly appointed.

This act gave such offence to my late employer and to the body of proprietors, that they used every means in their power to render the undertaking unsuccessful. This coach continued to run for upwards of twelve months, when, notwithstanding the exertions of my well-wishers and friends, the pecuniary loss was so great that it was ultimately given up. I was then under the necessity, by way of keeping the wolf from the door, of officiating as driver for my mother, whose scanty wages—her business not affording her the means of giving me more than an indifferent person—were barely sufficient even for that purpose. This derogatory employment, fly and post-chaise driving, continued but a few months; when, from the interest employed by some unknown friend, I unexpectedly received a letter from a large coach proprietor, appointing a meeting on the succeeding day at a town about twenty miles distance, which, with most sanguine anticipations, I most readily kept. On seeing him, he told me “that through the interest of some influential party, he was induced to make me an offer of driving a coach from S——n to W——th, a distance of seventy-five miles per diem, down one day and back the next, in the room of an old part-proprietor and servant, whose ill-health obliged him to leave, with but little hope of ever again being enabled to resume his duties.” He added, “Now, take care what you are about; be steady; you have as good a place given you as on any line of road that I am master of. I have heard that you are given to drinking; I hope that you will show by your conduct that the accusation is false.” I warmly thanked him, and on the succeeding Monday took possession of my “box.” I was now completely in my element; the coaches I had driven before were over comparatively short distances, and through monotonous scenery, but now I had seventy-five miles a day, embracing as great a variety of picturesque scenery as the eye would wish to rest on. I removed my wife and family to W——th, one of the towns of my destination on alternate days, at which I spent the Sunday. This town was situated in a beautiful bay, like what I have heard described of the Bay of Naples, wanting the high ground of Vesuvius in the distance. My wife and little ones, from low spirits, impaired health, and countenances of sickly hue, shortly obtained that buoyancy of spirit, and that ruddy complexion of countenance, which proximity to the seaside so frequently produces.

There I might have been seen, on a Sunday afternoon, walking

with my wife and children on the beautiful esplanade formed on the beach, envying not one amongst the many of rank and fashion that resorted to that delightful spot to inhale the renovating breeze from off the English Channel. I wonder not at good old George III. selecting this spot for his summer bathing residence, its somewhat secluded and unostentatious beauty with much advantage contrasted with the glaring display of the rich mansions and bolder scenery of B——n, and the more fashionable watering-places of the present day.

This pleasing daily employment—leaving at about a quarter before eight in the morning, and reaching the termination of my journey before five o'clock in the evening—continued about fifteen months, with nothing to mar the health-inspiring exercise but the frequent excessive use of that accursed thing to which I have before alluded. It seemed ordained to be my curse; it tended to neutralize all the pleasing qualities of my better nature. The passing exclamation, when my name was mentioned in connexion with this vice, was, "What a pity!" In my past early experience of mankind I cannot, like many of the disappointed ones on life's stage, exclaim on the uncharitableness and underserving fault-finding propensities of my fellow-man; on the contrary, I received at that period of my life the good wishes, sympathies, and much assistance of a substantial nature, from those on whom I possessed no claim. I found many more ready to overlook and make excuses for my failings, which I by no means deserved, than to reproach me according to my deserts. At the expiration of these fifteen months, the former driver of the coach, who, as I have before mentioned, was also a part-proprietor, contrary to all expectation, recovered sufficiently to enable him, by diligent effort, again to resume his "seat;" and by keeping a helper by his side to afford him occasional relief, managed to maintain his situation. This again obliged me to turn my attention to other means of procuring a livelihood for myself and family. After six months of idleness, returning from an unsuccessful application for the management of a charity Foundation School, for which a master was advertised, and for which, from my previous habits and employment, I was by no means fitted, I accidentally heard of a gentleman, a magistrate, wanting a coachman. On the first intimation of this, the feelings of pride were aroused in my "Adamite nature," which were somewhat assuaged on my being informed that "livery" was not required to be worn. A house on his estate was provided to live in; and fortunately no waiting at table or other more menial duties were required, for which act and mystery my previous avocations in life did not at all befit me. Driven by a necessity which admitted of no choice, I, with a hesitating step and awkward mien, solicited

of this gentleman the favour of filling his vacant situation. As he had previously known me when driver of the coach, he commiserated the extremity of my position, which enforced my seeking so menial an employment, and expressed his fear that the contrast of his service with my former one would be too great to give mutual satisfaction. I succeeded in removing his scruples, and was forthwith engaged at a liberal wage, and additional perquisites of milk and vegetables. This, to a man of careful and provident habits, would have sufficed to render his life endurable till better things turned up; but I am sorry to admit that my old expensive and wasteful habits still so far influenced me, that some time was necessary ere I was disciplined into compliance with more frugal fare.

But, thanks be to God for His mercy and goodness in adapting one's mind and feelings to those changes in our temporal condition in life in which it is His pleasure to place us. My home was now situated at the northern extremity of a large park, about half a mile from the mansion; and many times have I looked with pleasure on my little ones lightly tripping across the park, on a fine summer's morning, to the dairy, for a supply of milk for their breakfast, and the day's consumption. The house, though small and inconvenient in some respects, with its neat flower-garden, and trellised lattice frame-work that covered the walls outside, over which crept the woodbine and sweet-smelling, white-flowering clematis, gave a humble charm and beauty to its appearance, which tended in some measure to reconcile us to its in-door inconvenience. There was one incident occurred during the time I was living with this gentleman which, as a faithful chronicler of actual events, degradatory though they may be, I am bound to mention. He kept two gardeners—the head one, a tall, bony Scotchman, of hard physiognomy and cold repulsive manners, who resided in the park at an adjoining lodge to my own. Whether the kind treatment my wife and children received from the family at the house, or from what other cause, I know not; but this man conceived an aversion to me and my family, which his bearing and manners too evidently showed. However, as long as his dislike was passively confined within his own breast, I cared but little for the ill-feeling. But time, at last, as in all similar cases, seldom fails to develop the venom, where such disposition is encouraged. It so acted on him as to produce the following *diablerie*. I had heard several complaints coming from this man of repeated losses of different vegetables from the kitchen-garden, particularly of the loss of one or two dozen of the sort of cabbages used for pickling. As it was no business of mine, I took but little notice of the matter till my attention was called to an evident alteration of manner in Mr. S., my employer, to

is me, and an inquiry made of me by a gentleman, a relative,
 ling with him, of "whether the shoes that I wore in stable
 : nailed?" to which I answered in the affirmative, wondering at
 drift of such question. This difference of behaviour on the
 of my employer having lasted some few days, I had resolved
 sk him if I had unwittingly given him any offence, when I
 ived a message from a young neighbouring farmer, with
 m I had been schoolfellow, to wait on him. So doing, he
 ised me that suspicion existed in Mr. S.'s mind relative to
 having something to do with the various robberies that had
 effected from his garden: to use his own words, he said—
 hen I heard Mr. S. suspected you, I was determined, at the
 of being myself implicated for receiving things knowing them
 e stolen, to state all I knew of the matter. The gardener
 e to my house, and, on seeing me, pulled from under his coat
 large red cabbages, which he presented me, at the same time
 ng me if I would lend him a large hamper to pack up some
 kery, which I accordingly did. Two days after this, who
 dd I see but this same man and his son, bearing between
 the identical hamper which I had lent him, filled with what
 ared, from a leaf protruding from under the cover, to be
 king cabbages.' This took place at the little inn in the vil-
 where the branch London coach changed horses (and which
 h, by-the-bye, I was afterwards destined to drive). The
 per, with its contents, he immediately put on the coach, and
 red it to some person in London. Now," he added, "you can
 ion this circumstance to Mr. S. at once, or wait till you are
 tly accused with the crime." I resolved to adopt the former
 od, for which purpose I sought Mr. S., apologized for the
 ruption, told him I had suffered much uneasiness from the
 ation in his manner towards me, which I attributed to some
 on endeavouring to disparage me in his estimation. He then
 me that "his gardener had informed him that on frequent
 sions he had missed vegetables from the garden, and that
 week previous two dozen of cabbages had been stolen. On
 asking the man if he had any suspicion of any one, he told
 'that comparing your stable shoes with the foot-marks on the
 nd, that the impressions of the nails agreed exactly.' Still
 added), Mrs. S. and the family will not believe it, nor should
 re entertained the suspicion for one moment; but I am sorry
 ive noticed lately a sort of looseness of manner in you, which
 I never noticed before, and which I am assured is produced
 a too great indulgence in strong drink; but, however, for
 future avoid that evil." Thus did this gentleman humanely
 condescendingly speak to me of my faults. On hearing the
 mation I had to give, he said, "I know Mr. E., from whom

you received this information; I will see him, and take the proper steps to bring the guilty party to justice." I was about to leave him, when he suddenly added, "He likewise accuses you of stealing bundles of wood from the 'pile;' on your way home through the park in the evening; but say nothing of this interview with me, and I will find means of eliciting the truth." Accordingly, by setting a person to conceal himself near the "wood pile," he found that this gardener and his son were in the constant practice of taking home, nightly, two faggots of wood. Mr. S., though a magistrate, and sworn to administer justice and repress crime, from humane considerations of the distress and misery that would be brought on this man's young family by a prosecution, satisfied justice by simply discharging him from his service. Thus was this man punished, and I hope, ere this, brought to repentance, and led to see that even in this world the wonder-working hand of God's providence makes our sins to find us out and prove our correctors.

After the above circumstance had passed over, I went on very comfortably in the quiet duties of my position, retaining the confidence of my employer, until my frequent indulgence in my old propensity placed him under the necessity of reluctantly giving me the usual notice to leave his employment. Business calling him to the town in which my mother still continued to carry on business, he informed her of his decision, remarking at the same time, that my love for stimulating drinks was such, that he thought a certainty of death itself would not wean me from the habit. This was in the year 1834, within about a month of my wife's confinement with her fifth child, in consequence of the proximity of which I was suffered to retain my situation till she had gained sufficient strength to undertake the fatigue of removal.

It was during one of my outbreaks whilst living with this gentleman that I first felt the symptoms of "delirium tremens," or rather, a sort of "magnetic clairvoyance;" it was not so severe in its nature as the former malady. The feeling developed on this occasion I shall be somewhat minute in describing, as it forms one of a series of evidences in what I have hereafter to relate of its producing that clairvoyant power on the soul or mind which realizes a telegraphic communication of the "inner man" with the immaterial essences of the invisible, or spiritual, world. On returning one evening across the park to my home (not inebriated), I was suddenly surprised by hearing the voices of a number of persons behind me, upbraiding me with my conduct, not only on account of its sinfulness in the sight of God, but as calculated to bring misery and suffering on my innocent wife and children. I seemed to hear the utterance of every word

clearly and distinctly. The different bacchanalian orgies of my past life were narrated from one to the other with the greatest exactness. I stopped for these supposed railers to come up with me; but no—they approached no nearer—they seemed to stop likewise. Having a friend living in an opposite direction, I turned with the intention of visiting him, hoping by so doing to get rid of the annoyance; but in vain, for still they seemed to follow me. On crossing a brook, the gurgling ripple of its waters over the pebbly bottom beneath, formed words and sentences of reproach to confound me. The breathing zephyr, as it slightly rustled amongst the foliage of the trees, joined its voice to the streamlet below in my condemnation. All this, at last, satisfied me that it was no mortal whispering that I heard; and under this persuasion, without visiting my friend, I returned back to my home, determined, from the fear of ridicule, to keep my mental hallucinations, as they no doubt would be called, within my own breast. In this resolve I succeeded, and in the course of a day or two my mind recovered its usual tone. Within a week of the expiration of the time for me to leave this situation, I was informed by the landlord of an hotel of an adjacent town, that a gentleman in the neighbourhood, having bought a pair of young horses, wanted a person to break them into double harness fit for his own driving. I made application, and succeeded to my wishes, recognising in him a gentleman that I had ridden with side by side after many a good fox in years gone by—a sport that my indulgent father, fond of himself, allowed me occasionally to partake of in the days of his prosperity. I gave my employer such satisfaction, that he continued to keep me with him long after completing the object of my engagement; and I should have most probably remained with him, I know not how long, had not my desires led me continually to importune, by letter, the coach proprietor I had formerly served, and who, on the return of the invalid coachman before-named, had promised me the first situation he had it in his power to bestow, which promise he at last fulfilled, chiefly owing to the kind interposition of the very gentleman I was at the time serving. I look back, even now, with a feeling of pleasure to the six or seven months' services I rendered this gentleman, having left him, much to my surprise, without any one dereliction of duty calculated to neutralize the good feelings or alter the good opinion he had entertained of me.

* * * * *

The Autobiography of a Drunkard contains in it the most monotonous, uninteresting detail of events that can be possibly imagined. The repeated indulgence in his degrading passion rapidly produces that obtusity of intellect under which the vivacity of mind and the nobler aspirations of his better part—the

soul—become so stultified as to prove a barrier to the full development of the nobler faculties of his being. Thus it was with me; I loved all mankind, and never did the cry of distress reach my ears, or solicitations for relief from the wretched appeal to my feelings, without a response as far as my means would permit. The intuitive sympathies of the finer feelings of humanity were powerfully elicited by such objects; and had I but possessed the moral courage to overcome, by self-denial, the craving desires of my sensual appetites, I had not been such a “blot” in creation. These were the anomalies that existed in my nature, entirely owing to early impressions and indulgences not corrected by proper example and education—an evidence that none of Nature’s laws can be infringed with impunity, and that reason, which renders man pre-eminent, can never be misapplied without punishment.

Thus, again, after a hearty good-bye to the family household, did I again resume my old employment of “handling the ribbons,” professionally so called. My route this time was over part of my old ground, sixty miles per diem, thirty miles up and down. On arriving at one end of my destination, at eleven o’clock in the morning, I had no useful object in which to employ myself till the hour arrived for resuming my duties on the coach—five o’clock in the evening; and thus were left six hours in a large fashionable town, to be spent in idleness or folly, the enervating influences of which tended still further to corrupt and debase my moral nature. Two brother “whips” arriving at the town about the same time as myself, we generally met, soon after, at a friend’s, who carried on the business of a brewer and cooper, where, seated in a homely manner on some of his half-finished barrels, we were wont to discuss sundry pots of his eightpenny ale, till time reminded us of the near approach of the dinner hour, of which meal we invariably partook at a tavern kept by a former “knight of the whip;” but before reaching our restaurant, a half-way house was selected, for the purpose of swallowing a glass of gin and bitters, as a provocative to appetite, and as an assistant of the powers of digestion. This was the only meal during the twenty-four hours I could indulge in, to do which it at last became necessary to imbibe a vast quantity of stimulants, sufficient to make a moderate drinker inebriated, to artificially produce the requisite incentive. Grog and tobacco occupied our time till the arrival of the hour for my return; and as diluted spirits, or ale, formed my “refreshment” at each change of horses, on my arrival at the end of my journey I had, to every one’s observation, partaken of more than a “*quantum suff.*” consistent with ebriety. I might even then have escaped worse consequences, had not the politicians of the town, awaiting with impatience the

oracle of information just imported from St. Stephen's, seized me with a "will-ye nill-ye" sort of manner, and installed me leader of the night's carousing. Thus, from a too yielding disposition, I was fast progressing on the road to ruin. This became my daily routine; and well I recollect the envy with which I beheld my brother whips, with stronger constitutions and unimpaired stamina, partake of these indulgences with impunity. At last, after several months of the same debasing practice, one night, late in the autumn, within ten miles of my destination, I was seized with a fit, half-drunken, half-apoplectic, and precipitated from the coach-box to behind the horses' heels, one movement of which would, in all probability, have consigned me to eternity; but, through God's providence, the poor animals intuitively stopped, and, half-stunned, though partially sobered by the fall, I crawled from underneath the coach, and again mounted the box. Having at the time no passengers on the coach, the circumstance was never known. This had the effect, for a little time, of making me more careful; I had even firmness enough to risk the displeasure of my political friends, by immediately going home after leaving the coach. I felt, at the time, no ill effects from the fall; but I have no doubt it had something to do in producing another approach to delirium tremens, with which I was about this time visited. I was awakened one night by a number of persons, who seemed to be calling me from the road, underneath my window, to come down and join them. I awoke my wife, and asked her the meaning of it: she did not understand me. I told her that a number of persons were calling me, from outside the house, to come down and join them in their pursuits; some were going out shooting, some horse-racing—all about to proceed on some object of business or pleasure. The voices were so numerous that they appeared to proceed from untold millions. As I persisted, with every appearance of rationality, in the reality of my assertions, my wife very naturally asked me "How so many persons as I described could find room to exist in so confined a space?" I told her that that difficulty was all made easy and clear to my apprehension. The voices I heard, as voices, were all emanations from disembodied spirits; their immaterial being or essence, taking up no room, enabled them here to remain in the same locality which they inhabited in the flesh. Some voices appeared to my imagination to proceed from those who had been dead for centuries; others, who had departed at a more recent date, some of whom I had well known; all seemed to be talking about their different engagements, as in the days of their materiality; and those I had known I recognised by their voices. One said, 'Leave him alone just now; he won't be with us yet; his time is not yet come.' Such was the shape this fantasia took on this

my second attack of "mental aberration," or rather, "mental reality."

How long I was confined at home in consequence, or whether confined at all, I now forget; but not one iota of the foregoing impressions, so indelibly are they engraven on my mind, can ever be forgotten. I continued my duties on the road for about ten months after this, nothing occurring to call for particular notice, except a day's holiday occasionally, to get rid of the effects of a debauch the preceding night, when one morning—a summer's morning—after having for a week completely saturated myself with "the accursed thing,"—so much so, that it resembled "burning lava" in my veins, and I only wonder spontaneous combustion had not taken place,—I was driving, or rather, attempting to drive, into a town, as early as eleven o'clock in the morning, in a shocking state of intoxication. I was discharged in the greatest disgrace, my character lost, my health impaired, and with no distant prospect of absolute starvation. But, blessed be God, the Father Almighty, who did not, as I deserved, in this my aggravated wickedness, utterly forsake me. A gentleman of the neighbourhood, taking compassion on my little helpless family, and hoping that these sore trials had worked in me reformation, which I, vainly trusting in my own strength, hoped as well, procured for me a subordinate Government situation in the Great Metropolis, but at so low a weekly wage, that my wife's greatest economy made the sum scarcely suffice to keep the children clothed and fed. The situation I now filled was of that nature that brought under my notice many curious incidents—*faux pas* in high life; the revelries of the disciples of Bacchus, and sports of the votaries of Dame Venus, in middle and lower life; the cunning of the sharper and the ingenuity of the thief, each driven to the practice of his art by dissipated habits or improvident waste. But as a relation of these will only give us a further insight into man's depraved nature, which my own personal history sufficiently illustrates and exemplifies, I will forbear to give it, and briefly bring to a conclusion this part of my narrative of life's past experience, by stating that, after about nine months' servitude in the above situation, disgusted with my calling, and still under the necessity, imposed on me by my previous habits of inebriation continuing, my discharge was again rendered necessary; and thus once more I became as the "offscouring of all things," shunned as a pest, and pointed at with the finger of scorn as a degraded type of human depravity.

* * * * *

Notwithstanding the abandonment of myself to the influence of the intoxicating cup, and the misery and desolation that I had so frequently brought on myself, my dear wife, and little ones,

my love for them was most undoubted, *malgré* the assertions to the contrary of the cold, phlegmatic, and uncharitable moralists whose peculiar "temperament" allows not Bacchanalian excesses to be their besetting sin. Each individual has "a sin"—a sin which his nature and his disposition render peculiarly his own—avarice, ambition, love of frivolities and dress, pride, envy, the giving oneself up to the pleasures of the world;—all these, without the grace of God prevent, will as much render the soul unfitted for being the recipient of the spiritual and refined delights of heaven on earth, as those grosser and more sensual sins which, from their glaring nature, more conspicuously attract the notice of fellow-sinners. *Yes! my children I loved!* But when sober, and capable of reflection, I could not bear their caresses; their innocent prattle went like daggers to my heart; the tears of my much-injured and affectionate wife, when, under the most agonizing feelings, she implored me, for her sake, the children's sake, and for my soul's sake, to abandon the vice that was fast bringing her and the dear children to the workhouse and the grave, drove me to madness, and, frequently rushing out of the house, I have been ready to cast myself from one of the bridges, in the vain hope that, by ceasing to live in this world, I could produce on my mind the effect of fabled "Lethe's stream," and that, by the act, past recollections could be buried in oblivion.

At this particular time, 1837, in a large city, totally unknown, without a friend or a relative to whom I could apply for advice or employment, a very few days or weeks must have found me a claimant on "parish relief." Everything looked dark—there appeared no bright side—not one glimmering ray of hope to guide me in the way by which to procure employment to sustain my all but starving children. Ah! poor, distressed, burdened sinner, never despair! "thy Saviour liveth!"—"Christ is all in all!"—"thy God is a God of love!"—"He is a Father to the fatherless; a very present help in time of trouble." How often have I noticed the providence of a wonder-working God manifested at the time of my—and man's—greatest necessity! The more abandoned and shunned by the world, the closer is He at hand to give relief to work His way.

My wife, in canvassing for votes to procure admission for my eldest son—one of seven (*alas! since unhappily wrecked and drowned at sea*)—to St. Ann's School, Brixton, raised me up a friend in the person of the humane and much-respected secretary of that institution, who, although it was not in his power to meet our wishes regarding my son, yet used his interest in procuring me a situation in a "Company" then in course of formation, which once again, by God's blessing, placed within my reach the means of providing for my family.

This was in October, 1837, and with this "Company" I still (1853) remain. Nearly sixteen years have gone by since I entered their service, twelve years of which, though I drank a great deal, I never went the same lengths in my besetting sin; after which time the raging desire of my old lust again overcame me, bearing down all opposition, carrying me captive wheresoever it would, and in consequence of which had again been nearly the means of casting me loose on the world's cold charity, the relation of the cause and effects of which will form the sequel of this my narrative.

I would, by way of preamble to this sequel of my life, call to my and the reader's recollection, how often it has been our lot to notice the readiness with which persons convicted of gross error in moral conduct, or on matters of business, make strong efforts and resolutions of future amendment and caution, which resolves are fully acted on till the next strong temptation to err, which is given way to from the sheer necessity that the habit has imposed on us. Habit—all-powerful, prevailing habit—how gifted to reconcile all the contradictions to which our nature is prone: the miser his gold, the man of business his calling, the sensualist his pleasures,—all of which survive in the mind through habit, the physical energy of the body necessary for the accomplishment of its purposes.

On the 2nd of October, 1837, with a joyful and thankful heart, I entered on the duties of my new calling, resolutely determining, in *my own strength*, to avoid the abuse of the intoxicating cup. Ah! little did I know at that time that nothing but the totally ceasing to taste of alcoholic drink could cure excess in such a temperament as mine—I, who for the greater period of my life had lived but by stimulants, and by partaking of the least drop of this "venom of asps," lost the power over my will, and was led by the syren captive. I had, very shortly, by indulgence again in my fatal propensity, more than once nearly lost my situation, when by some means "teetotalism" was introduced to my attention; and reading shortly afterwards a notice of the intended opening of "Chelsea Temperance Hall," 1838-9, I mentioned the circumstance to my wife, who most readily embraced the proposal of attending the opening of the Hall; and it was mutually agreed that we should both sign the pledge,—a determination taken on the part of my wife as an encouragement and example to me, she being at all times an extremely abstemious woman. After hearing several stirring speeches, showing the inutility of these drinks, either for the purpose of preserving health or of imparting strength for labour, we both signed the much talked-of pledge, now upwards of fourteen years since, which pledge my dear partner has consistently and conscien-

y kept, notwithstanding the importunities and the ridicule of my friends. Now, what did this total abstinence from drink give rise to in one who, for nearly thirty years of his life, had been a confirmed inebriate? Why, in less than twelve months from the time of signing this pledge, the total changes from levity and carelessness, to thoughtfulness and sobriety, were the means of more fully developing the experience I had gained in my previous situations in life; and some improvement which I suggested in the working of the business of the company in which I was employed, being appreciated and acted on, I was promoted to a situation more than equal to my expectations. My health, from the change in my habits, for the first seven months wonderfully improved; my spirits were of that buoyant nature, in consequence, that I could hardly restrict myself from walking in the streets, but felt inclined to lay aside the rules of decorum, and run. My pledge was sacredly kept for fifteen months, when, suffering from some ordinary and simple indisposition, I applied to a *medical man*,* who, on learning the nature of my intemperate habits, ordered me to drink two glasses of stout per diem, observing at the same time, that if I continued in my plan of total abstinence from alcoholic drinks, I should soon be food for the worms. I unfortunately "listened to the voice of the tender mercies," vainly hoping that my past experience of the horrors attending the habit of indulgence in strong drink, and the leniency I had exerted, during the fifteen months I had kept my pledge, would have kept me from ever more becoming intemperate. Vain hope! mistaken self-reliance! And I would here again, to earnestly press on the attention of any young man whose eyes these lines may meet, should he unfortunately already have contracted a liking for the inebriating cup, which merely from love of company and good fellowship may excite, though he may as yet avoid excess, take care that use, in time, does not become a confirmed habit, which will certainly in the end lead to the drunkard's grave. Few men have self-command over their moral powers,—the same, after the excitement of the glass, which they before possessed. The more that he feels himself exhilarated by the pleasing draught, or, as he expresses himself, "the more good it does him," the more he should be convinced that his temperament is the one above all others that would cease the indulgence. The foregoing advice of some of our faculty has sent thousands back, as "the dog to his vomit," and the sow to her wallowing in the mire." Pause, ye medical professors of the present day, ere you prescribe that to patients which is causing the ruin of millions of souls.

My very surgeon, I have recently been informed, is dead—cut off in the prime of life, principally through his indulgence in this vice!

Thanks be to God's providence in enlightening men's minds to search after truth—thanks be to Him for the new light thrown on this question by students of physiology in the present day! We know that there are medicines, as tonics and stimulants, in the "Materia Medica," much more effectual than alcohol in any form or shape, and which, if always substituted medicinally in the place of the body and soul-destroying leaven, would tend much to bring into disrepute the dangerous practice of making these drinks a fashionable daily beverage, and thus save many a backslider. Thus, as I before observed, after owing my promotion to total abstinence, and after having strictly kept by my pledge for fifteen months, I was encouraged by this son of Esculapius' advice to again partake of the "accursed thing," the chief instrument in Satan's hands for trepanning the souls of men. Two glasses a day, as might have been expected, did but for a little time; my business taking me out of doors a great deal, the importunity of my friends—so called—when they found that I was no longer a strict abstainer, quickly overcame the reluctance I at first felt to increase the quantum. The natural result very quickly followed, and I not unfrequently found myself what is commonly called, "disguised in liquor."

This state of things continuing for some seven or eight years, alternating between abstinence and the excessive use of the beverage, I could never touch it with impunity. Total abstinence or gross inebriety was my practice. When I hear one person tell another that "he should do as he does, leave off when he has had enough," I compare such advice to one person carrying a certain weight a given distance, and another being blamed for inability to carry the same for more than half that distance. At length, after continually sipping every half hour for days, for the sake of keeping up the necessary stimulation—eating nothing—the sought-for provocative of these beverages at last ceased to be felt; they completely failed even in their intoxicating property; I called, on my way home in the evening, on a gentleman of my acquaintance, and was describing my feelings to him very rationally, as he afterwards informed me, of having the apprehension of some great calamity hanging over my head, an indescribable sensation bordering on despair, which drink no longer seemed to have power to dispel. He sympathized with me, and advised me when I got home to wash myself over with tepid water, well rub myself with a rough towel, and go immediately to bed. On reaching home, my wife was surprised to see me so sober, rational, and apparently composed. I acted on my friend's recommendation, and retired to bed, with the vain hope of composing myself to sleep. I shall never forget that night, so fraught with horror, that even now, at nearly six years' distance, my blood curdles at

the thought. "Whether in the body or out of the body," as the holy apostle St. Paul describes, "I know not;" it was not natural, though it might have been magnetic sleep. I found myself walking in a large and rather secluded street of an extensive city, in the dusk of the evening, when suddenly, a loud cry—not in words, it seemed to me, but a cry that shook all nature, and that all creation felt—"The Son of Man cometh!" And immediately, on my looking up, I beheld an innumerable host of angels, which no man could number; they appeared to fly in a sort of wedge-like form, the leading angel, larger than the others, having a trumpet at its mouth; those that followed gradually grew less in size and greater in number, assuming a shape something like what we have seen represented of the cherubims. They flew "steadily swift," as an eagle's flight; the smaller angels darting down and gathering up the people in the street, like the eddying whirlwind of a summer's day gathers up the sticks and straws and dust. We were thus caught up in knots of eleven or twelve persons, of all ages and sizes indiscriminately; one or two old men, with girls and children, were in the lot I was whirled up with. Each individual, judging by my own experience, had his doom fixed. I was immediately changed from the form (though possessing the same feelings) of a human being, into that of a globe,* a ball, or, indeed, as it seemed to me, in reality and shape, a world of darkness—darkness the most intense—fated to revolve on my own axis, in an orbit, round an amassing centre of gravity, a fixed sphere of darkness. The Spirit immediately told me, or rather the fact emanated from the Spirit, that this state was that of the existence in "everlasting blackness and darkness of despair,"—that as the sun, in the system of the visible universe, was the great centre of attraction, giving out warmth, and light, and life; so, on the contrary, this dark central globe of attraction was hell, Satan's home, from whence proceeded misery, despair, and woe, to endure for endless ages. It seemed that I revolved on my axis exactly on the same principle as that of the earth—continually turning round. I was always in the greatest agony; full to repletion, never empty, though the contents of my stomach were continually leaving me; under the most intense sensation of sickening agony, yet never lessening the overpowering sense of fulness. This was to be my punishment for ever and for ever, for having so grossly abused the natural appetites which God had given me for the sustenance of my body. I had so revolved about three times, though it seemed ages, under the torture of mind and agony of body, when I returned to this world; in other words, I returned into and

* Every human creature is a world to himself, in himself; his sins, his virtues, thoughts, and feelings, all emanate from the living principle within, by which his future state will be governed.

quicken the body. How long this magnetic trance-like state continued, I know not; but of so appalling a nature was the impression produced on my mind by the settled conviction of the reality of the tortures endured, and was, I felt persuaded, to be reimposed on my final entrance in my spiritual state to the unseen world, on the dissolution of my body, that I could not bear its contemplation, but endeavoured all in my power to anticipate my fate by attempting to dash my brains out against the wall, as no other means presented themselves to my notice with which to accomplish my purpose. This continued a day or two, every portable piece of furniture being removed from the room. Continuing still to agonize on these reflections, my wife earnestly entreated me to appeal to that Being, through the medium of a Saviour, whose ears are always open to the cries of the distressed. This induced me to turn my thoughts to that source of help, feeling myself to be a condemned, lost soul. The "great enemy of mankind," for a long time, urged that my sins were of too dark a dye to find forgiveness; that I had sinned against light and against truth, and had crucified the Son of God afresh, and nothing was left but a fearful looking forward to a fiery indignation from judgment to come. But to these and other suggestions of Satan, I seemed to have on the other side of me, as if from the breathings of angelic natures, sentences of Scripture full of hope and love, as an answer to these condemnatory charges, urged by the "arch-enemy of man."

These delusions—no, these realities, fearful realities!—assumed a different shape from those I have before related, inasmuch as then, voices and utterance of words were distinctly heard. Now, on the contrary, I felt intuitive spiritual emanations, that seemed to proceed from two distinct intelligences within,—one leading to hope, the other driving to despair. As these urged themselves on my mind, I seemed under an irresistible power, obliged to give utterance to them; when a word failed me to complete the passage—for they were all texts from Scripture—my wife would assist me by supplying the necessary word, for every fresh hope seemed well grounded only as the enemy's accusations were answered from the Book of Life. For these I would bless, thank her, and call her "Eve." She begged me not to call her "Eve;" but I looked hard at her, and saw clearly enough that she represented in herself the first mother of mankind,—she appeared pure in her nature as before the fall,—and the words and sentences to which she directed my attention seemed to me, by the Spirit's suggestion, to represent links in that perfect chain of the Word of God that was to bind the "Deceiver" throughout eternity. This importuning God, through the Saviour as a Mediator, went on for some nights and days with but little intermission, the

absolute reality of past horrors still keeping possession of my mind, till at last my medical attendant had great doubts of my recovery, and asked "how it was, at intervals, I was always wanting the Bible to read, when before my illness, as he had been told, I had shown no particular predilection in its favour?" I told him what was then the fact,—that in times past I did not understand its contents, but that now I seemed to read and understand every line, both in its natural and spiritual sense. I had evidently, to every one's perception, undergone some mental change; some mental magnetic spell was on me; every incident in my past life was palpably before me, engraven on my mind as on a book; whole sentences, nay, nearly whole chapters of God's word I could quote from memory, though I had not read them for years before. I made my son write from my dictation what memory spontaneously brought forth as applicable to my spiritual state. The sense no longer seemed ambiguous; every sentence seemed to contain a world of meaning. I no longer wondered, as heretofore, at the punishment mentioned in the Apocalypse for taking away one word from the Book of Life, that God should take away his part out of that Book of Life; and I moreover now see the truth, and its applicability to the sinner, of what is said in the Gospel of St. John, that "in the beginning was the Word, and the Word was with God, and the Word was God." Appealing to this God through my Saviour as a Mediator, and answering in this Word my "persecutor," God in me gained the victory. At one particular time, whilst engaged in my intense supplications, I suddenly saw the whole of my children, seven in number, and wife, standing at the foot of the bed, surrounded by a halo of soft and heavenly light; I felt under the conviction that the meaning of this vision was, that I saw them represented in this state as saved souls. Glowing with surprise and pleasure at this sight, I looked intently again, and exclaimed, "What! all?" The Spirit answered me, "Aye, all!" I had scarcely realized the joy it gave me, when my adversary whispered, "You do not see yourself there!" My joy vanished, my fears returned; I again, like Jacob with the angel, renewed my importunities, and wrestled with God, and exclaimed, "I will not let Thee go except Thou bless me." At length, in the midst of my agony, I saw above a scarcely perceptible ray of light,—that ray, that little twinkling ray, was like life from the grave. In fervour my prayers increased. The light grew stronger; I felt more composed than I had for days; my fears allayed, I slept a blessed sleep (I had not closed my eyes for thirteen days); for, on awakening, I felt that indescribable "peace of mind which passeth all understanding." Whilst blessed with this feeling, my wife came into the room: I sat up in bed, and told her that I was perfectly happy. I said (it

seems now to me presumption), "I am a saved soul,—my sins are forgiven me." On something being mentioned about the probable loss of the situation I filled, about which I had previously been so anxious, I said, "I am in God's hands, I fear nothing: God has said, 'Seek ye first the kingdom of God and His righteousness, and all these things shall be added unto you.'" My fears on this head entirely disappeared.

From this time I gained strength rapidly—so much so, that my medical attendant was astounded to see me so soon, after this three weeks' illness, walking with as elastic a step as though I had never been ill. When convalescence returned, still in the enjoyment of the indescribably happy state of mind before spoken of, I felt an irrepressible desire to again join the ranks of the total abstainers, and accordingly took the first opportunity which a meeting presented of again signing the abstinence pledge, which was accompanied by earnest prayers that I might not again swerve from it; and during the nine months I observed this, I was the happiest of mortals. Nature in me seemed exempted from the ills of mortality; everything I looked on—the works of nature or of art—seemed to call forth thanksgivings to the great Creator. Looking up at the starry firmament at night, and gazing on its splendours of revolving planets, of fixed stars, suns of other systems, and the great and wondrous whole,—so absorbed my feelings were, and so filled my soul with awe, wonder, and love, that I had some difficulty in restraining myself from kneeling down, in the face of man, to pour forth my gratitude to the great Maker of all for his love in enabling me to be a partaker in joys so great.

* * * * *

"Ah!" I think I hear my reader exclaim, "why this pause? What! again, after being brought to that happy state, that realization of heaven upon earth, that millennium state of blessedness which will be enjoyed by His people when 'His will is done on earth as it is in heaven,' which the great movements of the present day seem fast making way for,—after being a partaker in all these un hoped-for blessings, hast thou again done despite to the Spirit of Grace—sinned against light and truth, and trampled under foot and crucified the Son of God afresh?" Reader, I have!—I had committed the unforgiven sin! But God is love.

I said about nine months I enjoyed this state of happiness, when my Adamite nature again led me into sin; neglecting the means of grace, I became careless, and fell from this height of spiritual fervour, which seemed, when gone, to be lost for ever. Sin is ever progressive; there is no pausing in the downward course. Satan once again got the victory, and made use of his subtle and specious arts by stifling convictions, to lead me again

into that abyss from which I had before so frequently, by God's special grace, been extricated. I again partook of the drunkard's cup; and so bound over, body and soul, was I again to its servitude, that I abjured for ever, as a monstrous error, the total abstinence doctrine, and avowed that I would never again become converted by its sophistry and fallacies. I continued under this delusion four years, occasionally taking less, as my feelings of coming ill-health at times admonished me. It was about this time alcoholic drinks seemed to produce on me a different physical action; and instead of getting stupidly and insensibly unconscious, my intellect and apprehension seemed, under its influence, astonishingly to expand. I could carry on my argument, on any subject with which I was at all acquainted, with such method and vigour, that neither I nor any of my companions considered me to be drunk. I essayed to take my departure, when, much to my surprise, I seemed to have lost the locomotive power, and as a policeman observed, when I told him that I was drunk, that if so, it was my legs and not my head, for that I talked too reasonably for a drunken man. In this manner I continued sipping every half-hour, every day, for several days, as I could not eat, with an idea of stimulating myself to that exertion necessary for me to fulfil the duties of my calling. The result can be foreseen—again *delirium tremens*, or a species of it, attacked me, and now in a more fearful manner than ever. This was about the end of July, 1850.

It seems to me, in looking back to this period of my experience, that Satan gains more power over the soul of the inebriate each time that he falls into this state of syncope. I believe it is a state in which God leaves the soul for a time—in some cases, for eternity—entirely abandoned to Satan's power. Again his influence was constantly exerted to cause me to commit suicide; and nothing but my soul being occasionally urged to prayer by ministering spirits, prevented the accomplishment of his purpose. In this condition I still continued mechanically to fulfil the duties of my station, but, no doubt, in so strange a manner as to attract the notice of all with whom I had any business to transact; and yet I possessed sufficient tact to make my singularities attributed to any other than the right cause. Again I had my sleepless nights and restless days, harassed with the most fearful forebodings, and threatened by the denunciations of the "wicked one." All the sins of my past life were brought individually and collectively with fearful distinctness to my view; each separate sin seemed mysteriously to bear its part to work out that retributive justice with which I was then being punished. The veil seemed lifted that concealed the torments of eternity. I then felt that it was no corporeal punish-

ment in the next world that awaits our sins, though typified in this world by a natural element—fire—the sufferings inflicted by which our materiality can realize. It is the mind, the conscience, the soul, that immaterial part of us, that is to realize the torture typified by burning brimstone and fire—a fit emblem of its reality. Again the demon made use of the same weapons he had heretofore used, but with far greater power and success; I seemed entirely to despair under his accusations and threatenings, verified as they were by the “Word.” I was, after great agony, enabled to answer him by some word of truth in its proper interpretation, suggested to my mind by some heavenly antagonistic spirit; he was no sooner driven away by one reply, so suggested, than he brought another more fearfully condemnatory to my soul’s views—so I continued to be tormented until I found myself, as in my former experience, out of the body in a liquid lake of molten fire. In my feelings on this occasion there is an anomaly. I seemed to realize the torment inflicted by the liquid lake but for a moment, and yet I seemed to be there for ages. I was irresistibly impelled to call out, in the spirit, so loud, that in that fearful place it seemed to reach immensity, the following words—“How long, Lord? how long?” These words I was commanded by the Spirit to call three times; and so loud did I call, that it seemed to shake the foundations of earth and hell. On coming to myself, or on returning into the body, methought it necessary, to carry out God’s purpose, that the same cry should be made in the flesh, which I essayed to do, but was, in my attempt to give utterance to the words, stopped by my wife placing her hands before my mouth, and calling down my eldest son to assist her. I looked on her, and said, “What, Eve!” (for she still appeared to me, in the state I was then in, to again represent our first parent, “Eve”)*—“You suppress the word of life? you that formerly gave to me the word”—alluding to the experience on a like occasion some years back. I looked hard into her eyes to see if it was indeed “Eve.” Yes, she was the first mother; but there was an expression in her features different from that heavenly look she had when I first identified her as “Eve.” On asking her the meaning of the change, the Spirit answered me—“You saw her then before the fall, in her original purity; you see her now after the transgression, contaminated by sin; hence the wicked part of her nature induces her to assist the wicked one in suppressing the Word of Life.” Thus encouraged by the Spirit, I struggled, and eventually succeeded in giving, in a loud cry, utterance, with much opposition, to the predestined words, “How long, Lord?—how long?” three times, which

* Long since the above was originally written, I accidentally came across the derivation of the word “Eve,” from its original meaning. It is, “*Life-giver*.”

seemed, as before, to reach to the confines of the earth. On my last call, I was answered by the words—"When death is swallowed up in victory;" and the Spirit moreover told me to answer all my spiritual tormentors with those words, and "to rest there." He then added, "You are sealed." I supplicated to be informed whether for "glory" or "perdition," but could get no further answer. The only hope I had was from his before telling me "to rest there."

* * * * *

The Conclusion.—Reflections.—As I lay on my bed gradually recovering from the effects of the foregoing excesses, my thoughts became insensibly engaged in analyzing the act of the Saviour in turning water into wine at the marriage feast at Cana at Galilee, and of His administering wine to His disciples on His last partaking of the Passover, on His instituting the Eucharist. Was it possible, I asked myself, that our blessed Lord would set an example of partaking of that beverage, the use and abuse of which would hereafter become a curse and reproach to us as a nation calling itself after His name,—more especially as a great majority of physiologists have declared the use of it to be not only unnecessary to a human being in a state of health, but to act injuriously on the finer tissues of the body, and otherwise disarrange the more susceptible part of man's nervous system,—it being a well-known fact that some constitutions are of that delicate construction, that not the least portion of alcoholic drink can be partaken with impunity, without giving a false colouring to objects, by which such person's self-denying power is lost, and thus causing them to err? Whilst these thoughts were revolving in my mind, I again seemed to have the same powerful agency telling me "to search!"—"search!"—"search!" till I was impelled, as it were, to get out of bed and get the Bible to satisfy my doubts. Under the same irresistible tuition, I sought for that which preceded the Eucharistic rite of the Passover, the formalities of which institution I found in the 12th chapter of Exodus, verse 15—"Seven days shall ye eat unleavened bread; even the first day ye shall put away leaven out of your houses; for whosoever eateth leavened bread from the first day until the seventh day, that soul shall be cut off from Israel." Verse 19—"Seven days shall there be no leaven found in your houses." Exodus, chap. xxxiv. ver. 25—"Thou shalt not offer the blood of my sacrifice with leaven." Now, had alcoholic wine been used on that occasion, it must have been leavened, fermented, and undergone the first process to decay, which would have been a very inapt emblem of "the Blood of the New Testament,"—that blood that flowed from that body of our Blessed Lord, that had in it no element of decay. The human nature, derived from his mother

Mary, had been so purified and made perfect by suffering, and overcoming temptation, as fitted that body for becoming the residence of His divinity, and by the process purged it of all elements of dissolution. But it is useless considering further, or arguing a point which is not disputed by those who have made themselves acquainted with the late manners and customs of the Jews. There were two sorts of wine used in those days—one fermented, leavened, or alcoholic; the other, and most commonly used, as being most congenial to their tastes and the habit which their climate produced, unfermented, of the expressed juice of the grape, before leaven, that “type of sin,” had been applied to it. The wine used at the Passover of the Jews of the present day is, I am given to understand, of a somewhat similar nature—is unalcoholic. Believing this fact, many eminent divines of the Christian Church (nonconforming) make use of the unchanged element when acting on this command of their Master, to “do this in remembrance of me.” Somewhat exhausted by the mental exertions used in the investigation of the above subject, I lay back on my pillow, with the hope of composing myself; but a short time elapsed before I was again “acted on by the Spirit” (I use this phraseology, as the impulse given seemed of that uncontrollable nature as to seem supernatural) with the same “Search!”—“search!” I seemed to be for a time satisfied, but still more urgently did the Spirit tell me to “Search!”—“search!” I again got the Bible, and found out our Lord’s institution of the Eucharist, which I came across at the 14th chapter of St. Mark’s Gospel, 12th and following verses—“And the first day of unleavened bread, when they killed the Passover, His disciples said unto Him, Where wilt thou that we go and prepare that thou mayst eat the Passover? And He sendeth forth two of His disciples, and saith unto them, Go ye into the city, and there shall meet you a man bearing a pitcher of water: follow him.” I read so far undisturbed; but on coming to the passage, which I must needs repeat, it had such an effect on me,—“and there shall meet you a man bearing a pitcher of water: follow him,”—I became so agitated that I nearly fainted. On recovering, I was impressed with the presentiment that some great theological fact was about to be given to the world, in connexion with this ordinance, which had never been thought of before, which was still further confirmed by the “Invisible Presence” most urgently reiterating, “Read on!”—“Read on!” I read on till I came to the 22nd verse of the same chapter (14th)—“And as they did eat, Jesus took bread, and blessed, and brake it, and gave to them, and said, Take, eat: this is my body.” 23rd verse—“And He took the cup, and when He had given thanks, He gave it to them: and they all drank of it.” 24th—“And He said unto them, This is my blood of the

New Testament, which is shed for many." I at this part seemed to be interrupted, and was asked—"What is my blood of the New Testament?" I paused to reflect. The question (similar) was repeated, as in another version you find it—"What is the New Testament in my blood?" I mentally answered, "the contents of the cup,—the wine." The Spirit replied—"How do you know it was wine? Turn to the 19th chapter of the Gospel of St. John, and the 34th verse;" and I read—"But one of the soldiers with a spear pierced his side, and forthwith came thereout blood and water." I exclaimed—"Blood and water!" "Blood and water!" said the Spirit. Thus is verified what is stated by St. John—"This is He that came by water and blood, even Jesus Christ; not by water only, but by water and blood. And it is the Spirit that beareth witness, because the Spirit is truth." Water is the type of truth. "This," said the Spirit, "is the New Testament in His blood; the water that flowed from His side. The blood showed and typified His human nature, derived from His mother Mary, according to the flesh; the water His divine. When He had perfected that humanity by overcoming temptation, and finished the work the Father gave Him to do, it was then that He bowed His head, and said, 'It is finished.' The blood of His perfected Humanity, poured out as the grand atonement by which His people received remission of their sins; the water, by the partaking of which in faith we are sanctified emblematically, and fitted by God's grace to become recipients of heavenly joys." After so far telling me, I said, on reading further—"Verily I say unto you, I will drink no more of the fruit of the vine until that day I drink it new in the kingdom of God." He replied—"I am the vine, ye are the branches;" read the Lord's Prayer,"—which I repeated with much reverence—"Our Father, which art in heaven, hallowed be thy name; thy kingdom come; thy will be done on earth, as it is in heaven." He stopped me to say—"Thou wast not taught to pray in the Saviour's words, for what will never be. His kingdom will come, when His will is done on earth, as it is in heaven; then will He drink the wine, new and unfermented, in His Father's kingdom on earth, when, with virtue and goodness, universal temperance shall prevail, and the Spirit of Evil, typified by alcohol, go back and reside with the Spirit who gave it." So impressed was I, at the time, with the truth of the above revelation (not having partaken of any sustenance for some time, having no desire), I immediately rose in my bed, rang the bell, and ordered a cup of water to be brought me, on receiving which I knelt down with the greatest awe and reverence, under the impression of the omniscience and omnipresence of the Deity, and enthusiastically, with much fervour, invoked God's blessing on

the element which I then verily believed to typify His holy Spirit, "the New Testament in His blood."

I was then referred, as a climax to the whole, to the 44th chapter of Ezekiel, 21st verse, where I read—"Neither shall any priest drink wine when they enter into the inner court." 23rd verse—"And they shall teach my people the difference between the holy and profane, and cause them to discern between the unclean and the clean." The Spirit then left me, telling me, "I was sealed." This took place, dating from this 1st of November, 1853, nearly four years since, from which time, by God's mercy, I have not touched the unholy thing. I feel assured that when the time will arrive when "His kingdom is come, and His will is done on earth as it is in heaven," its use will be banished the earth. John the Baptist came—a water drinker—heralding in the "first coming of Christ;" so I believe this present total abstinence movement from alcoholic drinks to be a faint ray of that light which will ultimately prevail to herald in "His second coming."

ART. VI.—A SINGULAR CASE OF INSANITY.

IN an article entitled "Illustrations of Insanity, furnished by the Letters and Writings of the Insane," which was published in a previous number of the Journal,* Dr. Brigham introduced the following letter as a specimen of most entire incoherence:—

"MY DEAR SISTER—As the cedars of Lebanon have been walking through Edgeworth forest so long, you must have concluded that I have returned to the upper world, but I am still in purgatory for James K. Polk's sins, which, if they do not end in smoke, surely have as good a chance of beginning that way as the ideas began to shoot, for if T. had not left his trunk on the cart at the Depot, our shades would have been a deuced sight nearer to Land's End than Dr. Johnson said they would by the time the Yankees rebelled—(*ad interim*)—but I am now about between the porch and the altar, as Dr. — used often to express himself, under the droppings of the sanctuary, where I wish to forget old things for a time at least, and return to some better place than the last. I could have kicked plagiarism to the seventh seal.

"Do you know what this same long, taper roller is? well pop it off, if by their works ye shall know them. Pollock has as good a right to be a D.D. as that doctor we read of in Blackwood that sought so long for spoons and found them not, because they were all lead until they were new burnished in Holyrood palace, very near the place where Polk traced his pedigree, a little too near the loins of William the

* "American Journal of Insanity."

Jequeror, for the pleasures of memory or sense either, for Thompson, Bryant, Africaner, Ainsworth, or anybody else. I said I had been to the Poles, and S. had been there, and let T. Y. be witness that it was something more than stars, it is one thing neither you nor I can comprehend till we compare notes, but there is the least pit in hell that you ever saw, or ever will see, and a certain little white Devil just as ready now as ever to lend a helping hand to the cook to give her a lift over those bars. If you should ever be inclined to try Nebuchadnezzar's hollow furnace, for he did not wash all my guilt away did he? No indeed for he silvered my head nicely, so as to make it shine afar off. But the end of these things is not yet—consult S. I should like to see H. Honor to whom honor is due—tribute to whom tribute—give the Devil his due.”

The writer, a student in one of the Eastern colleges, was brought to the institution about three months before the date of the above letter, labouring under an attack of acute mental disease, induced by too intense application to his studies. Six months afterwards he was discharged recovered; subsequently rejoined his class, and completed his college course with honour. He commenced the study of medicine, graduated at the College of Physicians and Surgeons in New York city, and connected himself with the New York Hospital, where he filled the office of house-physician with great credit to himself and advantage to the institution. Soon after the expiration of his term of office he had a fatal attack of remittent fever.

The following extract from his diary is furnished by his father. In connexion with the letter, it has a peculiar interest:—

“Yesterday I found in the ‘American Journal of Insanity,’ April, 1848 (p. 303), a copy of my letter written to Helen about six weeks before I left Utica. It is the most absurd medley of nonsense, but it recalled to my mind ideas of no little interest.

“My memory during the whole period of my violent illness was preternaturally active, calling up scenes and recollections of very early childhood; the toys and various utensils then about me, the little adventures and queer speeches which will cling to one's memory, while more important matters escape—these, and almost everything which, in a varied and not limited series of reading—names, scenes, historical and personal incidents, fact or fiction, phrases of other languages, passages of poetry and of the Bible—all these, by the merest similitude of sound, of name, or any other near or remote principle of association, were grouped in my mind, and would flit across its vision with inconceivable rapidity.

“Often, I remember, have I lain on my sleepless bed, and strung one group of words together, as they thus occurred to me, and, catching at some slight analogy in the last, would run off into another distinct series; and thus, till the tongue fairly wearied,

and the lips refused to move, have arranged the affairs and settled the disputes of generations past, present, and yet to be; of princes and potentates, of injured queens, and defrauded heirs apparent—rummaging the legends of the Tower, and all the dark, romantic lore of Scottish feudal life; righting the wrong in every department or age of human existence, quarrelling most irreverently and pertly with many characters which good people deem sacred, and elevating in my own imagination many of those luckless but interesting heroes who, with many dazzling and redeeming qualities, had yet the misfortune to be wicked.

“Here came out in full my sneaking liking for Saul and Pontius Pilate (a very clever fellow, by the way, who occasionally appeared in the hall, and had an unfortunate squint), Henry VIII., Herod (whose valiant slaughter of Judea’s infant-ry always inspired my young mind with a dread feeling of admiration), and Nebuchadnezzar. All these were living, breathing personages to me—for death seemed but a voluntary step, and a slight one—and with *these* I communed in the night-watches. I thought I heard them answer me, and I spoke as in reply—sometimes sadly, remembering some sorrowful scene gone by, with which I intimately connected them; sometimes in irrepressible glee; and again in anger—the mood varying with the turn of a word. Sometimes I would fall upon what, to me, was a sublime thought, and remembering Napoleon’s saying, was pretty certain to change to a ludicrous interpretation, or some other such turn.

“Something of these fitful changes I recognise in this letter. It represents, tolerably well, the state of my mind—*very* well, for it is almost a transcript of what I would have said, if speaking to my sister. I well remember the day when the sheet of paper was brought me, upon which I wrote this, in a scrawl of a hand, for I dashed impetuously along, and what a sane person would say was an ill-spelled letter. But the spelling had its associations. This was the day, or one or two after, I had seen Helen.

“Shortly after I got one from *her* which most grievously distressed me. From it, I first realized that I was under restraint, and in an *Insane Asylum*. I held my head between my hands, and pressed it against the wall; every pulse came bounding with double force and rapidity; it seemed as if I *should* go mad then, and for ever. I did not notice those who passed—nor spoke, nor interested myself in the employments of others. I was *changing*.

“When Dr. Brigham passed through, I *begged* of him to take me from this place. I was too proud for that before. He tried to put me off. I followed him to the end of the hall, and then with my eyes till he passed out of sight.

“It was not many days before the doctor took me with him, as

he went his rounds, and left me in a lower and a better hall. Then the scenes with which many of my delusions were connected, were changed. I looked no more at things around me through the distorted medium of an assumed character. I was I. B. M., not Mr. E. (my convenient α character for any number of unknown personalities.)

"It was not without a voluntary effort, and *that* a painful one, that I tore myself from a glorious world of my own creating, and a throne of my own construction, to take my place in a real and very commonplace lower planet, full of ordinary and intractable characters. For did I not leave the inspiring and elevating society of the great, and good, and heroic of every age—and glorious schemes of empire—and grand ideas of improvement, whether commercial, or military, or literary, or in the fine arts? Were not tall monuments and noble temples to rise over this and every other land? Were not the thoughts of genius, expressed as they never before had found expression, to glow in fresco, on canvases, or to stand forth in pure dignity in the marble statue? Were not the scenes of my childhood's pleasures to be made sacred by its offering?

"Then should the pale scholar and the inspired poet no longer waste unheeded away, but each in his place should enjoy his fit reward. And the white sails of every nation, but rather of mine, should be spread to the breeze in every sea, bringing back richer freights than those of Solomon; and armies should stand ready at my bidding, innumerable, and comprising in their legions every force that ever in truth or poetry took the field—the battalions that contended with each other when there was war in heaven, the veterans of Napoleon, and the tiny squadrons of fairy land. But these I left: and, as I descended from my throne, reason resumed hers.

"Not many days afterwards, I wrote a most urgent letter home, as perfectly sane as ever I was or shall be, requesting to be removed.

"Day after day, and hours, and minutes I counted, till I reached my home—FREE."

ART. VII.—PSYCHOLOGY OF KANT.*

BY PROFESSOR HOPPUS.

THE works of Kant mark the date of the second period of the German philosophy. He was born at Königsberg, in 1724; and here he lived and died, never having travelled more than a few miles from his native place. Madame de Staël remarks that there is scarcely an example, except among the Greeks, of a life so strictly philosophical. A more recent writer observes that he was a genuine "type of the German Professor: he rose, smoked, had his coffee, wrote, lectured, took his daily walk always precisely at the same hour. The cathedral clock, it was said, was not more punctual than Herr Kant."† His almost recluse life may excuse us from entering into its details, and this will better suit our space. We may, however, refer to Borowski, Schubert, and the "Biographie Universelle;" also to Jachman's "Letters." Kant died in 1804. He wrote a great number of works. The most important are his "Criticism of Pure Reason," "Criticism of Practical Reason," and "Criticism of Judgment." It is to the first of these works‡ that we shall chiefly confine ourselves.

We must not be led into any detail of the state of philosophy in Germany when Kant arose: suffice it to say that, until he had fairly grasped the sceptre which had fallen from the hand of Wolf, a sort of Eclecticism prevailed, in which heterogeneous elements were not seldom blended,—rationalism, empiricism, dogmatism, scepticism; but the predominant tendency was towards a kind of experimental psychology, and towards the history of philosophy, a source of psychological criticism which was somewhat neglected by Kant himself. The Kantian metaphysic ultimately triumphed, to give way in its turn to the other ever-varying systems which have succeeded each other in Germany; to which systems, however, Kant's writings form a clue which is wholly indispensable.

Our author was led to his speculations by the account which Hume had given of the nature of human knowledge, and more especially of the doctrine of causation. Hume maintained that our notion of the necessity of causation has no basis deeper than association and habit. Kant regarded this notion as an essential dictate of the understanding, the necessary result of our mental constitution. He tells that he soon found that the connexion of cause and effect was by no means the only one by which the

* "Immanuel Kant's sämtliche Werke," herausgegeben von Rosenkranz und Schubert. Leipzig.

† Lewes's "Biographical History," iv. 90.

‡ "Kritik der reinen Vernunft."

understanding represents to itself, *à priori*, a necessary connexion of things; but that the whole of metaphysics consists of nothing else than such conceptions. He was led in this way to his entire system of subjective *à priori* knowledge. We may here remark, that, in pursuing his speculations, his style and phraseology are often crabbed, scholastic, and involved. It is not very often illuminated by examples, of which there is in his writings a great dearth, so that almost everything is presented in the most abstract form. The main subject not seldom seems lost in a labyrinth of entanglements. The "Criticism of Pure Reason," a work of 800 pages, sadly wants condensation. Kant tried to meet the outcry about its obscurity by writing the "Prolegomena;" in which he is certainly more brief, but not much more luminous.

Kant proposes to submit to criticism the powers and limits of the human mind. His theory is that our speculative knowledge is wholly subjective—of object or thing in itself we know nothing, but only its phenomena or appearances as presented to us. He assumes as beyond a doubt that experience is the occasion of all our knowledge. He also lays down the fact of consciousness, as at the basis of all our psychological phenomena. Here he agrees with Descartes, and his aim is the very same as that of Locke, so far as that he seeks for truth by an analysis of consciousness and a survey of the capacities of the human mind. The sense of self, the "I think" (*Ich denke*) accompanies every act of knowing; that is, we are conscious of it. Moreover, he adopts as a whole the ordinary principles of formal logic, as being an expression of the laws of thought; hence some knowledge of logic is essential to the student of Kant. We know by means of sense, understanding, reason; but we only know subjectively and in relation to our faculties. External objects are, to us at least, only phenomena appearing in space, which though itself unperceived, underlies them all. It is the condition of all outward perception, but not of the object itself. Time is the condition of all perception of things outward, and of all internal consciousness. Time, like space, belongs not to things, but only to our mode of viewing them. Space and time are the mould in which the mind casts all the objects which it contemplates. They are, in fact, mental "receptivities;" faculties by which we receive knowledge. The understanding prescribes laws to nature, and to the whole circle of our knowledge: nothing can present itself to us as a thing to be known, except in immediate subordination to the primary elements of our intellectual constitution, the conceptions of the understanding. Reason, as distinct from understanding (as Kant makes it) is deceptive as a source of speculative or scientific knowledge; for in its effort to grasp the supersensible, it breaks down, for the very reason that it aims to transcend the sphere of

sense, the only proper sphere of the understanding. But when reason is *practical* (moral,) it may then attain to the knowledge of the great truths,—a moral law written on the heart, a moral lawgiver (God,) and the immortality of the soul.

We now proceed to a more special analysis of Kant's metaphysical speculations, as nearly in his own language as may consist with our being understood by the intelligent English reader; and we shall use for this purpose all the sources which his writings afford, adding, where it seems desirable, illustrations as well as explanations of our own. "He made THREE FACULTIES of the soul," the faculty of knowing (*das Erkenntnisvermögen*); the æsthetical faculty, by which the sentiment of taste is gratified or pained (*das Gefühl der Lust und Unlust*); and the faculty of "appetition" or will (*das Begehrungsvermögen*). He adds, "I have expounded the principles of the first," the knowing faculty, "in the 'Criticism of Pure Reason'; those of the third," the will, "in the 'Criticism of Practical Reason.'"^{*} He subsequently published his principles of Æsthetics in nature and art, and of Teleology, or the judgment we form in regard to the harmonies and adaptations of the world of nature, in his "Criticism of Judgment."

Agreeably to the above view of the powers of the human mind, Kant regards philosophy, in its immediate relation to the cognitive or knowing faculty, as THEORETICAL. The object is here to inquire into the laws of sense and intellect, and to decide upon the extent and validity of our speculative knowledge. PRACTICAL Philosophy seeks to determine duty, moral law, and their results; and to this branch belong the truths of man's freedom and immortality, and God's existence, all of which Kant firmly believed, in opposition to atheism, scepticism, pantheism, materialism, and fatalism; but which momentous convictions he strangely, as we shall see, pronounced utterly beyond the province of *theoretical* knowledge. Intermediate between the theoretical and the practical he places teleology and æsthetics, and regards them as belonging to that function of the cognitive faculty which we term judgment. Each part of philosophy is treated by our author as founded on *à priori* principles, that is, on those self-evident elements of knowledge which are constitutional to the mind itself, though they are all brought to notice in our consciousness only by experience: thus, from our sensuous experience of finite dimensions, we at once know that space itself (which underlies these dimensions) is infinite,—a proposition which we can never prove, because our experience can never test it, but which we feel it would be absurd to deny or doubt. Such a proposition therefore expresses an *à priori* or "transcendental" truth, so called

^{*} "Brief an Reinhold," 1787; vide Reinhold's "Leben," 1825, s. 129.

because it transcends all actual experience. What Kant means by calling space the "form of external sense," we shall see in its proper place.

In Theoretical Philosophy we have to do with the question, "What can we know?" The "*Kritik der reinen Vernunft*," and the "*Prolegomena*," are wholly occupied with the answer. Empirical knowledge, or that which we gain from experience alone, however valuable, is far from being the highest kind of knowledge. Experience can only teach us what is, and what is likely to be. Metaphysical or *à priori* knowledge, wherever we can attain to it, teaches us what must be necessarily and universally. Metaphysics,* as applied to the soul or mind, is therefore not empirical, but rational psychology—a doctrine of the mind which we arrive at by pure understanding and pure reason, which are its only sources.† It is the peculiar characteristic of this metaphysical knowledge that it is *à priori* in the strictest sense. We sometimes use the term *à priori* in a lower sense. We say that it may be known, *à priori*, that an undermined house will fall: but the general principle that bodies fall to the earth when unsupported must have been previously known by experience. In Kant's language, *à priori* is applied to knowledge which is wholly independent of all experience and induction. Experience does not at all constitute or warrant this knowledge, it is only the *occasion* of its being elicited from our minds. If we had never seen the actual following of one event on another, in such a way as to get the notion of the latter being *caused* by the former, we should never have arrived at the principle that *every event must have its cause*. Yet, however large may be our experience of causes and effects, this proposition will always infinitely transcend that experience; for how can we be certain that, because we have never witnessed or heard of events without real or supposed causes, therefore no event ever happened or ever will happen without some cause, in all time and in all worlds? Still, we should think it absurd to doubt for a moment of this truth. Since, therefore, no knowledge of ours is antecedent to experience in time, all knowledge must begin with it. Thus the elements of all our *à priori* knowledge lie latent and dormant in our mental constitution till experience elicits what virtually lurks within; just as the occasion which discharges the electric spark reveals what before was latent and inert.

* Metaphysics, in the most general sense, means the science of ultimate and general principles, either relating to external things or mind. In Aristotelian phrase it was: *ἡ πρώτη φιλοσοφία*, the prime philosophy (Aristot. "*Metaph.*" lib. i. cap. 1); and *ἐπιστήμη τοῦ ὄντος ἢ ὅντος*, the science of being as such, or in the most general sense.—Ibid. lib. iv.

† Sie ist Erkenntnis *à priori*, oder aus reinem Verstande und reiner Vernunft.—"Prol." § 1.

Mathematical science furnishes brilliant examples of *à priori* knowledge, whether we consider the axiomatic truths and the definitions on which it rests, or the vast logical deductions which are made from them. Every mathematical proposition is an *à priori* judgment, based ultimately and in the last analysis on purely *à priori* principles. And here we see clearly that not only in judgments, but also in conceptions, an *à priori* origin is manifest. Thus, not only is the axiom, *two straight lines cannot inclose a space*, in the highest sense *à priori*, being both self-evident and incapable of proof by deduction from any more general *à priori* principle; but the notion of *space* itself is *à priori*—it is already pre-supposed as the necessary condition of the sensible world. We may, indeed, fancy all that occupies *space*, including bodies themselves, annihilated; but *space* itself we cannot imagine by any possibility destroyed. So we cannot but think of *substance*, corporeal or incorporeal, as something different from the properties which we experience in objects; and we cannot, by omitting this, that, or the other property, get rid of the conception of substance, which still forces itself upon us, of necessity, because it has its seat in our faculty of cognition *à priori*: we are compelled by our mental nature to pre-suppose substance as the substratum of all properties. Further, according to Kant, knowledge *à priori*, as thus explained, may be "pure" or "impure": the proposition, *infinite space is eternal*, is *à priori* and pure, as no empirical element is contained in it, for experience can never teach us either the infinity or the eternity of space: but *every change has a cause* is "impure," because the conception *change* is wholly derived from experience, though the proposition itself is *à priori*.*

Immediately connected with the above distinctions between *à priori* and empirical knowledge, is Kant's distinction of all judgments into *analytical* and *synthetical*—a distinction which relates to the office and value of the predicate in any given judgment or proposition. Analytical judgments are merely explanatory (*erläuternd*); the predicate here adds nothing to the subject, but merely analyses what was already involved in it. If I say *all bodies are extended*, I have not at all enlarged my previous conception of body, I have only analysed it; for the very conception of body implies extension, and did so before the judgment itself was uttered. Now, it must be observed that in all analytical judgments the predication is *à priori*, they are mere necessary developments of their respective subjects; and this although even both the subject and the predicate may be "impure," or, in other words, wholly empirical. The term *gold*, for instance, expresses a conception entirely framed by our

* Vide "Kritik der reinen Vernunft," Einleitung, 2te Ausg.—"Pröl." §1.

experience of nature and the arts; the term *yellow*, and the term *metal* equally stand for what we have become acquainted with by experience; and the term "gold" includes them both in its meaning. Hence, if I say, *gold is a yellow metal*, I simply unfold what was already wrapped up in the term "gold." I require (says Kant), in order to know this proposition, no further experience beyond my conception of gold, which conception contains, that it is a metal, and yellow. It is evident that the characteristic "*à priori*" cannot be generally applied to these "analytic judgments" in the sense previously laid down by Kant, but only in a much lower sense; and we think that Kant should have said as much; for surely (to take the last example) all we know of "gold" is exclusively from experience; and he says that, when we know what it is, we know the predicate of the example; yet he defines knowledge *à priori* such knowledge as is absolutely independent of all experience.* The judgments which Kant distinguishes as synthetical, are not merely explanatory, like the analytical, but augmentative (*erweiternd*); they do not merely analyse the subject by linking it with the predicate, but they add the predicate something not contained in the subject. Of this kind of judgments are such as: *some bodies are heavy*, and (to use a former example) *two straight lines cannot inclose a space*. In both these cases, the subjects do not necessarily contain the predicates: we might attach a correct meaning to the word body without being obliged to think relative weight as between different bodies: we might have a true notion of a straight line or lines, and yet not think of them in reference to an area or rounded figure.

But while the two last examples are synthetical, in distinction from analytical judgments, they differ inasmuch as that the former is *à posteriori*, and the latter *à priori*. We will repeat these two last examples, for there is perhaps an advantage, when it is practicable, in viewing the same examples in different lights. Let us take the first, which is *à posteriori*; for how do we know anything about the weight of bodies? surely only by experience, which here enables us to add by predication something not contained in the meaning of the subject "bodies." All such propositions, then, are synthetic judgments *à posteriori*. The second example is synthetic, and it is also *à priori*: for here something is added which is not contained in the conception "two straight lines," as they can be thought without any reference to what they may or may not inclose; and we never can give any general proof from experience that "two straight lines cannot inclose a

* Wir werden also im Verfolg unter Erkenntnissen *à priori* nicht solche verstehen, die von dieser oder jener, sondern die *schlechterdings* von aller Erfahrung unabhängig statt finden.—"Vernunft-Kritik," suppl. iv. 2. Rosenkranz.

space." Further, our philosopher holds that not only all geometrical, but also all arithmetical judgments are *synthetical a priori*, for they add new matter to the subject, and carry with them necessity, which is non-empirical. Kant admits that the identical equation $7 + 5 = 12$ looks like an analytical proposition. Can I have the conception $7 + 5$ without having that of 12, and the relation of the latter term (the predicate) to the subject? He would say that I can, notwithstanding the material objective equality of the two conceptions. Our *cognising* that equality is another affair, and is subjective. We may see this if we try large numbers, when the two sides of the equation are not at once recognised as equal. Take $29,897 + 98,686 = 128,583$: here the thought of the two numbers which form the subject of this materially identical proposition, and the bare thought of their addition, do not involve at the same time the thought of their sum; we must actually add them to obtain this. It may be admitted that the theory seems at least pushed to its extreme limits in such examples as these; and if they can be accounted as subjectively synthetic, they are so, evidently, in a very different sense from that in which those examples are, on which Kant lays the greatest stress, and which lie at the very root of his entire metaphysical system—those examples, we mean, in which the predicate can in no possible way be thought out or worked out from the mere subject of the proposition—as, for instance, in the former example *every change must have its cause*: here the conception of cause lies out of the conception of change or of a mere event; it is the unknown x which the understanding grasps as necessary and universal, but to which neither experience nor calculation could ever lead us.

In regard to "some few principles" which belong to mathematics, Kant somewhat modifies his theory: such are $a = a$, or the whole is equal to itself; and $a + b > a$, or the whole is greater than its part. He admits they are "really analytical." He adds, however, that they are so only by a sort of ambiguity. They, in fact, derive their validity from pure conceptions (i.e. by synthesis), and we regard them as having the predicate already contained in the subject (that is as analytical) only because the predicate, though truly not thought in the mere conception of the subject itself, is so thought by virtue of an intuition (*anschauung*)* which we add to the conception. Kant repeats this qualification of the theory in the "Prolegomena." It is only because these judgments can be presented in intuition that they are admitted into mathematics: and but for their being so pre-

* By an intuition, Kant understands any act of consciousness which consists of an individual object presented as existing in space or time, either to sense or imagination.

sented, they would be justly regarded as synthetical. He says that such propositions are to us analytical only because of our sensuous experience—that, for instance, our seeing wholes actually divided into parts leads us to regard the predicate “greater than a part,” as contained and thought in the term “whole.” We suppose Kant to mean that but for this experience the term “whole,” as standing for a bare conception, would not necessarily have contained in itself the other term, “something greater than a part,” in such a way as to appear only an explication of that term, and so to make the proposition analytical.

We must not omit to say that some have altogether called in question or denied the truth of Kant's theory of analytic and synthetic judgments, or, as Sir W. Hamilton would term them, “*explicative*” and “*ampliative*.” M. Guiran,* for example, a strict adherent of the Hegelian school, maintains that every judgment is in itself analytical and identical, and that the distinctions of Kant are merely relative to the information of the individual. Now, if we say *a circle is a plain figure whose boundary is everywhere equi-distant from a certain point within called the centre*, this we may admit to be an analytical or identical proposition. But when we say *a circle may be drawn around any point for a centre*, it is evident that in this postulate we have gone beyond the mere definition of the circle. Again, M. Guiran's theory that all judgments vary only with the information of the individual, renders all our knowledge strictly empirical: but how can any experience tell us that *space is infinite*; yet who does not know this? We are not, however, sure that Kant has not in some of his examples extended his theory of synthetic judgments *a priori* too far.

On the general distinction between analytical and synthetical judgments, Kant grounds his entire theory of speculative or theoretical knowledge. Analytical judgments are often needful as leading to clearness of conceptions; but it is on synthetic judgments that we must rest for all the ultimate principles of rational science: not on judgments of experience, though these are always synthetical; for as they are entirely the result of experience, on which account we call them *a posteriori*, they can never be attended with absolute necessity. In the judgment, *all horned animals are cloven-footed*, for instance, we could never extract from the subject “horned animals” the predicate “cloven-footed.” We learn the fact from experience, and we then make a synthesis (combination) of the predicate and subject. But though we thus generalize, we are prepared to suppose that further experience might possibly show exceptions to the rule.

* “*Mémoire sur la Philosophie Allemande*,” 1845.

Not so in synthetic judgments *à priori*; for in these we annex the predicate to the subject with the conviction of their belonging to each other universally and necessarily: we can never imagine the possibility of any exception to the principle that *every event must have a cause*.

All the theoretical sciences contain synthetical judgments *à priori* as principles. The question, therefore, is—*how these judgments are possible?* in other words, how is pure rational knowledge possible? Analytic propositions are possible, being founded on the principle of contradiction: thus we cannot deny that *a circle has all its radii equal*, without virtually saying that a circle is not a circle. Synthetic judgments *à posteriori* are possible, as we know by the experience on which they are founded: thus we know that *water freezes at 32° of Fahrenheit*. In synthetic judgments, *à priori*, as we have already seen, we cannot extract the predicate by analysis out of our conception of the subject, nor can we get at the predicate by experience, and yet we are certain that the predicate belongs to the subject necessarily and universally, as in the above example on *causality*. How does this happen? We may reply, summarily, by the constitution of the human mind: but the complete solution, in detail, is the object of the Kantian critical or transcendental philosophy—called critical, because it is founded on reason's criticism of the powers and limits of our cognitive faculties—and transcendental, because it aims at bringing out the validity and the boundaries of all the knowledge we can have which transcends our actual experience.

Hence our author divides what he terms the main general transcendental question (*allgemeine transscendentale Hauptfrage*) into four parts:—how are pure mathematics possible?—how are pure physics possible?—how is metaphysic in general possible?—how is metaphysic possible as science? Mathematics are possible because they rest on the basis of space and time, out of which all the conceptions of pure mathematics (geometrical and arithmetical) are constructed *à priori*: for space and time are *forms* of that part of the cognitive faculty which we call *sense*; so that we are able to have intuitions (*anschauungen*) *à priori*, by means of which we attain to the corresponding mathematical judgments. This will be better seen presently, when we come to speak of Kant's remarkable theory of space and time, which is fundamental to his system. Pure physics are possible also, because they contain certain universal and necessary principles. Nature is to us only the existence of things as determined by general laws, and these laws Kant maintains are to us wholly subjective, they are the laws under which alone we can have intui-

* Vide "Prol." § 5.

ons (perceptions) of objects, or conceptions of them. He gives an example of a pure *à priori* synthesis in natural philosophy, *substance remains permanent*—i.e., amidst all changes of phenomena. Metaphysic is possible, just because synthetic judgments *à priori* are possible. Metaphysic consists properly of pure *à priori* knowledge, and such knowledge we find lying at the basis of all the rational sciences. In treating of the question, whether metaphysic as a science is possible, our philosopher thus replies:—In order for metaphysic to be a science, possessing self-evident transcendental truth, its foundation must be laid by first exhibiting *conceptions à priori* (as distinguished from judgments). These must be separated, and analysed, according to their different sources in sense, understanding, and reason, and complete tables made of them, which will contain *time* and *space* as the forms of sense, the *categories* as the forms of understanding, and the *psychological, cosmological, and theological ideas* as the forms of reason. Such a *Kritik*, says Kant, must expound in detail all that can be inferred from these *à priori* conceptions, and must establish from their deduction the possibility of synthetic knowledge *à priori*. It must also fix the boundaries of their use, and thus we shall have the basis of a science of such *à priori* knowledge. We shall see that this science has to do, not with the objects of reason, but with reason itself merely. Yet it is not the mere anatomy of our conceptions which belongs to empirical psychology, but metaphysics proper which aims at *à priori* knowledge synthetically.

From what has preceded, Kant concludes that there results the idea of a particular science, which may be called the Criticism of Pure Reason,* since reason is the faculty which furnishes us with the above principles of knowledge *à priori*. He does not, he says, propose an Organon, or complete system in all its range, but a review of the resources and limits of reason, a kind of preliminary guide (*Propädeutik*) to a full system. Hence he prefers the name "Transcendental Criticism" to Transcendental Philosophy. His aim, he says, is rather negative than positive; he wishes to purify our reason from error, rather than to build a fabric by its aid. He seeks here to lay the foundation. He hoped to be able to carry out his deductions to a complete system, under the title of "Metaphysic of Nature." This work was not to extend to half the length of the "*Kritik der reinen Vernunft*," and would be to him, he says, an amusement rather than a labour. Unfortunately it was never published. In the meantime, the present "*Kritik*" is to contain a complete list of principles for the construction of such a work.*

* "*Vorrede zur ersten Auflage*," s. 14. *Rechenkränze*.

Preliminarily to his division of the subject of his "Kritik," our author remarks that there are two sources of human knowledge, sense (*Sinnlichkeit*) and understanding (*Verstand*). By sense objects are *given* to us; by understanding they are *thought*.* Sense, as well as understanding, belongs to the Transcendental Philosophy, so far as sense can contain representations (*Vorstellungen*), *a priori*, as the conditions under which objects are given to us: for, by means of these conditions—namely, space and time, sense furnishes us with knowledge which, though manifested on occasion of experience, transcends its actual sphere, which is always limited to the particular and contingent, never embracing the universal and necessary.

We now proceed to Kant's general division of his great work, the "Criticism of Pure Reason," which is as follows:—I. Transcendental Doctrine of Elements (*Transscendentale Elementarlehre*), which occupies three-fourths of the whole volume. Under this head, we have—1. "Transcendental Æsthetic." We may observe that the word "*æsthetic*,"† here, has no meaning in common with the criticism of taste, by which we take cognizance of the sublime and beautiful. What Kant here propounds is, as we shall see, the doctrine of sensuous *perception* on his transcendental principles. 2. "Transcendental Logic;" under which head we have the two topics: (a) "Transcendental Analytic;" (b) "Transcendental Dialectic." II. The Transcendental Doctrine of Method (*Transscendentale Methodenlehre*). This is divided into four parts; namely: the *Discipline*, the *Canon*, the *Architectonic*, and the *History* of Pure Reason.

The first part of the Elementary Doctrine is termed TRANSCENDENTAL ÆSTHETIC. The English reader must not be too much alarmed at Kant's strange and scholastic phraseology: it is, after all, generally intelligible. Our author here deals with the passive faculty of sense, by which alone objects are given to us. Sense is the faculty of *intuitions*. We have an intuition of an object when it is presented directly, in any way, to any of our senses or to our imagination—for Kant makes imagination sensuous, not intellectual. Our intuitions are of *phenomena*, of things as they seem: of things as they are (*Ding an Sich*) we can know

* Kant says nothing, at the outset, of the essential distinction which he subsequently makes between Understanding and Reason (*Vernunft*), which will appear in its proper place. We need only say, just at present, that when this distinction is not immediately in his view, his use of the term "Reason" is found in the vague, general, and diversified senses in which it has been employed in ancient and modern times. Even the term *idea* (*Idee*), which is afterwards exclusively appropriated to Reason (in distinction from the term conception [*Begriff*], which is appropriated to Understanding), is repeatedly employed, previously, in the lax popular sense.—Vide *Krit. d. rein. Vern., Einleitung*, i. ii. s. 17. 26, 27. Rosenkranz, 1838.

† *αἰσθάνομαι*, to perceive; *αἰσθησις*, perception: hence the ancient distinctions *αἰσθητά*, things perceived; *νοητά*, things thought.

nothing, though these objective realities do exist. We only know their manifestations; that is, we know them only as they come to us. When an object produces a sensation in me, that of sound, for instance, or of vision, what corresponds in the phenomenon to my sensation is the "*matter*" of the phenomenon. This *matter*, then, is given *à posteriori*, or by actual experience. But phenomena must present themselves to sense, also, under a certain "*form*." Let us separate from our representation of body all the conceptions which the understanding annexes to sense—such as those of substance, force, etc.; and having thus isolated the sensuous faculty, let us suppose taken away from our intuition all that is empirical—all that belongs to mere sensation—colour, hardness, solidity, &c., and what remains? only the *form*, or pure intuition, which is all that sense can give us, *à priori*. Now, says Kant, there are two pure forms of sensuous intuition—namely, Space and Time. *External sense* places before us objects as without us, and always in space, in which alone shapes, dimensions, and mutual relations are determined. *Internal sense*, by means of which the mind contemplates its internal state—gives us, indeed, no intuition of the soul as object, as external sense gives us intuitions of body; still there is a determinate form under which alone the contemplation of our internal state is possible: all our mental processes must go on in time. We have no external intuition of time—we cannot see it (that is), hear it, or the like: nor have we any internal intuition of space, for intuition of it is wholly external. Time and space are not real things—they are not relations of things: what, then, are they? They belong only to us subjectively: they are, in fact, properties of our minds.

SPACE is not an empirical conception (*Begriff*), that is, one which is derived from external experiences: for I am always obliged to presuppose its existence as the very background of all my experience of objects. It is the condition which renders phenomena possible. Imagine a new orb created—space must already be in its place. Imagine all nature annihilated—space still remains. Space, then, is a representation *à priori*—a pure intuition; it is prior, that is, to all phenomena, and is pure form, or independent of, all our empirical knowledge of given dimensions: for they only overlie portions of its all-comprehending infinity. No mere conception can reach this infinity: yet every part of space may be infinitely produced. Hence, though it gives rise to conceptions, its original representation is intuition *priori*—not conception. Further: Kant argues that our representation of space must be originally intuition—that is, an *affair of sense*, because we can never get out of any mere *conception*, by its analysis, more than was before contained in it (hence

analytical judgments, as above); and yet, in geometry, the science which determines the properties of space, we get propositions which go beyond the subject of them, and obtain predicates, such as to make them synthetic and *à priori*. For this intuition of space stretches far beyond all experience, and underlies all perception of objects, showing that it is independent of them, and so rendering geometry possible, and its principles necessary. Kant gives us examples of such a principle: "*space has only three dimensions*:" "*different spaces are not successive, but co-existent*." And how, he asks, "can an external intuition anterior to all objects, and in which our conception of things can be determined *à priori*, exist in the human mind?" Only so far as it is native to the mind itself, having its seat only in us the subject; only inasmuch as it is our capacity of being affected by objects.

From these conceptions which we are obliged to form of space, Kant concludes that space is only the "form of external sense," or the *subjective* condition under which alone perception is possible. In regard to our cognizance of phenomena, or things as they appear, space has objective validity, for everything presents itself to our senses as in space. It has, therefore, so far empirical reality; but space is nothing the moment we regard it as belonging to things in themselves—that is, it is merely ideal; for things in themselves are to us a blank, we know nothing of them. What we call outward objects are truly nothing but mere representations given us by our sensuous faculty, of which space is the form; but the correlates of the phenomena thus represented, or the things in themselves, we can never know by sense; and as we have no *intellectual* intuition, (whatever any other beings may have,) we cannot know them at all. In one word, according to Kant, space is *in us*—not in the universe around us: it is a condition of the exercise of our sensuous faculty—not a condition of real objects. Yet, strange to say, Kant strenuously maintained the real existence of material objects as the basis or substratum of the phenomena which these objects occasion in us, while he would not allow it to be said that the real object requires space to exist in! It is no wonder that in discussing this subject, Kant's language is perpetually at war with his subjective theory—just as Berkeley cannot help talking of matter as a real thing every moment, while he denies its existence, and pronounces it an impossibility. It seems obvious enough, surely, that if material objects really exist independently of us, as Kant said they did, space must be as much a necessary condition of their existence, as it is a necessary condition of our perception of the phenomena which belong to them.

We must not omit a curious illustration which occurs in the

Prolegomena,"* brought forward as a convincing proof of the reality of space as being a mere form of perception; in other words, a mere function of our sensuous faculty, having no true externality, but being exclusively in us. The glove of one hand cannot be used on the other: the two objects are similar and equal, but not congruent—why so? "because space is nothing but determination of our sensitive faculty." A more singular argument, surely, can hardly be imagined. We should rather say that the case was an illustration of the real externality of space: for it is evident that when the left-hand glove is reversed, the separate four fingers each fit those of the right hand well enough, but the thumb is awkward because it is now pitched backwards instead of forwards. It is extraordinary what a passion for a theory will do! We confess that if such an argument has any meaning, to us it seems to go against the ideality of space rather than in its favour. The same may be said of two other illustrations which Kant brings forward—the incongruency of the equal images of the hand in a mirror—and the incongruency of equal spherical triangles on the globe, one in each hemisphere, when the triangles have for their common base an arc of the equator.

TIME, adds our author, is also not a conception which is drawn from any experience: for neither co-existence nor succession could come into perception,† if the representation of time did not lie *à priori* as a foundation. Things could never seem to us contemporaneous or successive, unless time for them to exist in, whether together or one after another, were presupposed. We cannot think away time from phenomena, we must always perceive them in time: it is the universal condition of their possibility, though we may imagine time void of all phenomena. The empirical conceptions of change, and therefore of motion, are only possible through and in time; and from this necessity of time as the indispensable condition of these conceptions, and of all phenomena, Kant terms it an internal intuition *à priori*, and a form of internal sense, as space is the form of external sense. On this necessity is founded the possibility of synthetic judgments *à priori* (as before explained) in relation to time: such as *time has only one dimension* (linear, or that of continuous process); *different times are not co-existent but successive*. These axioms cannot be derived from experience, which can never give us absolute universality or absolute necessity to our knowledge. Such axioms in fact give law to experience, and render it possible. They are the results of the pure form of our sensuous intuition *à priori*. Such is another example: *different times are*

* Sect. 13.

† *Wahrnehmung*—Kant sometimes uses this word as synonymous with *Anschauung* (intuition).—Vide "Prol." § 10: "*Anschauung, d. i. Wahrnehmung klicker Gegenstände.*"

but parts of one and the same time. Again we could not say *time is infinite*, unless we had the original unlimited representation of time in us as a basis. We may here remark, in passing, that, to us time seems more perplexing than even space. Kant has not remarked this. Indeed, his wholly subjective views probably prevented him from seeing the difficulty we allude to. Even Kant, however, notwithstanding his idealism of space and time, cannot avoid speaking of them objectively. Now we feel able readily to imagine space as wholly denuded of all objects—in fact, as an infinite void; but can we so readily represent to ourselves, as our author says, “time void of all phenomena?” The pure intuition (as Kant calls it) of time, is not more *à priori* on his system, than the axiom “time has only one dimension.” We see well enough what he means by this, for time has only length: but can we represent time to ourselves at all, excepting as a kind of flow? A flow of what?—of changes surely—of successive phenomena. How do we know that time has “only one dimension,” but by our being quite unable to represent it to ourselves otherwise than as marked by perpetual progressions or successions? Grant that successions are in time—yet, again, what is time apart from all successions? It will be seen that we here hazard no theory of time: we only start a difficulty—perhaps an objection to Kant’s statement “that we can very well represent to ourselves empty time.”

Our author further remarks that space, being the pure form of *external* intuition, can only be the condition of external phenomena. That is, space is not the condition of thought. Time, however, is the pure form *à priori* of all phenomena, whether of nature around us, or of mind itself. When he calls time the form of the *internal* sense, he means that it is the *à priori* condition of “the intuition of ourselves and of our internal state.”* Time is the *immediate* condition of all internal, and thereby the *mediate* condition of all external phenomena. It will be observed that Kant makes time as well as space sensuous: for man’s intuition, he says, is always sensuous. I can only “*intuit*” (have a sense of) myself through this form of internal intuition. It is true enough, as Kant says, that there is a difficulty, common to every theory, in saying—how the subject or *ego* (the *me*) can have an internal intuition of itself. The reflex act of self-consciousness—the cognizance we take of self—the introversion, as it were, of the mental eye upon itself, in our being conscious of our own personal psychological phenomena—this is a *fact*, however inexplicable. But it is quite another thing to say that our consciousness of self is a sensuous, not an intellectual pheno-

* Des Anschauens unserer selbst, und unsers innern Zustandes.—“*Kritik d. reinen Vernunft*,” s. 42. Rosenkranz, 1838.

menon: this, however, is what Kant says, and it is a peculiarity of his doctrine of Transcendental Æsthetics. His argument is, that the representations of consciousness, in the *ego*, the conscious subject, are given without spontaneity—that is, passively: hence, consciousness is wholly an affair of the sensuous faculty. On this principle, our consciousness of thoughts is as sensuous as our consciousness of sensations, or of the intuitions and perceptions of which sensations are the “matter.”

Our philosopher, before closing his remarkable theory of the absolute ideality of time and space, and of the wholly subjective character of all that belongs in any way to sense, specially guards the reader against supposing that his theory of the subjectivity of all phenomena, as essentially connected with that of the subjectivity of their pure or *à priori* forms (time and space,) by any means involves the assertion that phenomena are mere illusive appearances. No; objects as phenomena are really given; but as they are only given relatively—that is, so far as they are related to the conscious subject—we must distinguish the object as phenomenon, from the object as a *thing in itself*. Kant maintains very strenuously, in this part of his subject, that everything would truly be changed into mere illusory appearance, if we regarded space and time as objective—that is, as having any functions or relations out of our minds; though he does not make very evident how he deduces such a conclusion. He holds, too, that even our own conscious existence would become a mere illusion if we made it to depend on the objective reality of time, which, like space, can only be a form of the human mind, which, as a mould, gives its own shape and figure to what is applied to it.

The above is Kant's doctrine of perception: let us sum it up. What we call objects, are only revelations of them as they appear to our sensuous faculty. The real object we know not. What is variable in our sensations, varies with the agency which the objects exert on us; but there are two invariable elements which attend all our sensuous experience—space and time. Everything without us presents itself as in space: everything without us, and all our inward consciousness, are presented to us as in time. The reason is, that space and time are furnished by the mind itself. They have no existence apart from the mind: they do not adhere to the real objects themselves, as is commonly supposed. Time and space are not in the universe; they are only in us: they are essential constituents of our sensibility, or sensuous faculty; they are the forms or modes under which external objects and our own mental processes present themselves to us. As our knowledge of external objects is thus only phenomenal, not real or substantial,—so our knowledge of ourselves, our souls or

minds: our inward consciousness only presents to us the *me*, as phenomenon—that is, as it appears, not as it really is. It will be seen at once how Kant's idealism of perception differs both from Berkeley's and Fichte's: from Berkeley's, in holding that there are in the universe positive, real things apart from our minds, though we know nothing more of them, in themselves, than though they existed not; while Berkeley maintained that there was nothing but minds or spirits—all that seems real in nature being only modifications of our minds: from Fichte's, in holding that the mind is passive in sensation, being acted on by an outward *non-ego*, or not-self; while Fichte said that the mind unconsciously and spontaneously spun from itself the whole universe, and then mistook it for a reality. It is worth remark, that Kant pronounced Berkeley's idealism "fanatical,"* (calling his own "critical," and "transcendental;") and Fichte was named in Germany "the consistent Kant," because he boldly accepted the consequences of Kant's denial of all objectivity to time and space, and went the whole length of idealism.

No doubt, time and space are, as our author says, conditions, the one, of *all* our psychological phenomena, the other, of all the psychological phenomena of *sense*. Time, to us, underlies all thought and all perception: we can think and perceive only in time. Space, to us, underlies all perception: we cannot perceive any external phenomenon, or even imagine it, but as presented in space. But is this all? "Yes," says Kant, "space and time have no connexion whatever with things themselves—the realities which present to us the phenomena. Space and time are wholly in us." This doctrine is, we hold, perfectly gratuitous, and we may say inconceivable, if there be, as Kant says there are, real things. We may admit with our philosopher that all our knowledge is relative to our faculties. Things are known to us only as they appear to us; we only know substance as that which we cannot but suppose is the basis of the properties which appeal to our senses. We cannot know substance in itself, for we cannot imagine it apart from its properties, nor can we know the properties but as properties of substance; we cannot conceive of external or internal phenomena as the ghosts of nothing—we can only apprehend them as phenomena of matter or mind. No doubt, sensation is the result of the constitution both of the object and of the subject; just as a table is the result of the matter (wood) and the form which the workman gives to it, or as a piece of pottery is what it is both from its material and from its mould. So our perceptions of things can only be as things are exhibited to us, and as our perceptive powers enable us to receive

* mit dem mystischen und schwärmerischen des Berkeley. . . . Proleg., § 13. Anmerk. iii.

hem. But all this, surely, does not interfere with the objectivity of time and space. Surely it is not only of our nature to know things as in space and time, but it is also of the nature of *things*, if they exist at all, to exist in time and space. If we may say of physical phenomena that they present themselves in time and place, why should not their acknowledged causes (and Kant admits that real objects are the causes of phenomena) also exist in time and in place? And as the existence of the soul is also admitted, and its phenomena or processes go on in time, why should not the soul itself exist in time? How can the real being, the cause of the manifestations, be out of time, any more than the manifestations themselves? Surely the soul is as enduring as its phenomena; and how can either endure apart from time? How can effects be limited to time, or space, or both, and not their causes? It is quite inconceivable that a material object can produce effects where it is not present. Our not understanding the nature of substances or existences in themselves, does not at all militate against our bringing them under the time-and-space conditions, but the reverse; for all we know of them is, that they are something inseparably connected with their phenomena, and we are unable even to think of them apart from the latter. If things in themselves, or *noumena*, act at all, they must surely act somewhere—at some time. We need not say that we have empirical knowledge of the existence of real objects in time and space, as we have of objects as phenomena; but reason cannot but necessarily infer that, if they exist at all, they must exist in time and space. In this inference, reason only does just what she does in pronouncing that there are substances at all; for the conception of substance itself is not empirical, but *a priori*, being necessary by a law of our mind to the conception of properties and manifestations.

It is evident that, to have been consistent in denying the externality of time and space, Kant ought to have denied a material world; his entire subjectivity of nature would square very well with Berkeleyanism or Fichteism, but with his own avowed realism it is quite at variance. He believed in the real planets; but what, on his theory, would become of their motions round the sun in space and time, supposing all sensuous faculties to cease to exist? If time and space are mere "receptivities" or forms of our minds—what if there were no sentient beings? Is it conceivable that their annihilation would annihilate the time and space in which motion alone is possible? What imaginable effect would the destruction of all sentient creatures have on the movements of the planets? Kant's admission of realism may safely be pronounced to be opposed to the whole spirit of his speculations.

Again, it is a capital error of Kant's system that it makes time and space wholly *sensuous*. No doubt, time and space are the *a priori* conditions of our knowledge—the former, of our knowledge of our mental phenomena; and both, of our knowledge of the phenomena of sense. Yet it should not be said, on this account, that our knowledge of the necessity and universality of time and space, as such conditions, is of the province of sense. True, it is our sensuous nature that enables us to receive sensations, and to receive them as the signs of the external phenomena which cause them; but though sense is the occasion of our *a priori* conceptions of time and space, these conceptions themselves surely belong to our intellectual faculty. To call them “pure intuitions,” in distinction from the empirical intuitions (representations which actual experience gives us) of objects, is merely to beg the question. It might as well be said, that because our conception of *cause* is occasioned originally by our experiencing actual changes in the external world through the medium of our senses, therefore this conception belongs to sense. This, however, even Kant himself expressly denies, and affirms that our notion of causality belongs to the understanding. In fact, there is no proper distinction between this latter faculty and Kant's “pure sensibility.”

We actually see limited spaces—we rise, in thought, from this sensuous experience to the conception of an infinite, eternal space, which renders all our experience of limited extensions possible; but surely this latter phenomenon requires another faculty—intellect. With regard to time, we are, if possible, still more obviously shut up to the understanding. For how can our most limited notions of time be regarded as sensuous? Here time, we cannot but think, differs greatly from space; and Kant is not, in our judgment, the only philosopher who has erred by attempting to run a forced parallelism, throughout, between time and space. Grant that our muscular sense, or our visual perceptions, primary or acquired—that, in short, our sensuous nature alone enables us in the first instance to have any *limited extension* presented to us in the concrete, as, for instance, the length of a book in our hands, or lying before us: but, on the other hand, can we say that our notion of an hour or of a minute is a sensuous phenomenon? May we not have this notion quite abstractedly from sense, by means of the mere succession of our own thoughts? May we not be looking constantly at a clock that is before us, and see the continued progress of its hands, and yet, under different circumstances, have very different notions of the lapse of time; the notion of a long time, with weary waiting; the notion of a short time, with absorbing and agreeable ideas and emotions—and yet the actual time elapsed

shall be the same? True, we *measure* time accurately by numbering the visible beats of the pendulum; but can anything really be more intellectual than all our notions of time, even of its briefest intervals? Yet Kant makes time as well as space wholly sensuous, though he speaks of them frequently as "conceptions" (*Begriffe*).

More than this: Kant even attaches our *consciousness* to the faculty of sense. We not only take cognizance of external phenomena as occurring and existing in time; we are also compelled to regard all the facts of consciousness as taking place in time—this no one doubts. But Kant is hence led to make consciousness itself an affair of sense; for time is as much the form of our internal as of our external intuitions—that is, it is the form of consciousness. He first makes time sensuous, and then consciousness is sensuous too. In consciousness we have presented to us what is going on within our minds: we know our internal state by observing that it undergoes certain changes or modifications; only in this way is consciousness possible. In being affected with these modifications we are wholly passive, just as we are when affected by outward phenomena. Hence, while sight, hearing, smell, etc., constitute external sense, having space and time for its forms,—consciousness is nothing more nor less than internal sense; and Kant tries to justify his attaching it to our sensuous rather than to our intellectual nature, by dwelling upon its passive character, and denying to it all spontaneity. His argument would equally prove that our capacity of appreciating the sublime and the beautiful is sensuous, for certain affections or emotions are awakened in us by certain objects, involuntarily; yet it is only rational beings that can discern æsthetical relations, and Kant himself refers them to our intellectual faculty. If by consciousness of what passes within us be meant our cognizance of our various internal modifications as our own, surely consciousness is essentially intellectual, however accompanied or even empirically originated by sense. Even our judgments are not always voluntary: Kant himself says, that the categories according to which we pronounce our judgments are not subject to our will, but are necessary laws of thought. In thus making consciousness sensuous, we hold that our author is again placing at the basis of his system another capital error. We shall see what he says further of consciousness under the next head of the "*Kritik*;" and let us not be surprised if we shall find it hard to reconcile his assertion that consciousness is a modification of the sensuous faculty, with his subsequent theory in which he views consciousness in relation to the *understanding*.

We now proceed to the Second Part of Kant's "*Elements*;" namely, his TRANSCENDENTAL LOGIC.

"Our knowledge," he says, "is wholly by intuition, and by conception. Intuition and conception are both necessary in every case in which we can be said to *know* with the understanding. Both may be either pure or empirical. When we have an object presented to us by our receptive faculty of sense (as when we actually see or hear anything), we have an *empirical* intuition of it. When we think an object in relation in some way to its representation, we have a *conception* of it. A savage sees a distant house merely as an object, not knowing its use: he has only an intuition of it. Another person recognises it as a dwelling for man; he has in addition to the intuition also a conception, which the other has not." Kant would say, that as to the *matter* of their sensuous impressions, both were alike: both saw the object; but the *form* of the cognition is in the one only intuition, in the other both intuition and conception.* All, however, is here empirical (only through actual experience). So also the conception of *change* is empirical: to make it intelligible, we must refer it to some actual phenomenon. But both intuition and conception may also each be *pure*. We necessarily must have all external phenomena presented to us in space—space is a pure intuition, as we have already seen. Our conception of cause is a pure conception; for we cannot see causes, or have them presented to our senses: we only see changes—we *think* their causes. Sense is a passive faculty (a mere receptivity): understanding, by which we can have conceptions, is a spontaneous faculty; without sense, no object would be given: without understanding, no object would be thought. Thought without some object to think of, is void: intuition, or any sensuous representation, without conception, is blind. It will here be borne in mind, that it is a peculiarity of Kant's theory, that we can have no conceptions, whatever, but such as have a relation to sensuous objects. Of this more hereafter.

Pure logic is strictly formal, relating only to the form of thought, and apart from the matter or subject of thought. This alone is properly the Science of Logic. By *Transcendental Logic*, our author understands an inquiry into the origin and validity of the pure forms of the understanding. There are intuitions *à priori*, the necessary forms under which all sensible objects must be presented to sense: these are time and space. There are also conceptions *à priori*, the necessary forms under which all thought which relates in any way to these objects, must occur in the understanding. Now, Transcendental Logic is the pure science of these laws in their origin: it is an exposition of the source and basis of Universal Logic.

* Vide Kant's "Logik," Einleitung v.

Logic, whether general or transcendental, may be divided into *Analytic* and *Dialectic*. Analytic unfolds the elements of the function of the understanding, and comprises the necessary laws of all formal truth—truth being the accordance of our knowledge with its objects. Still, Analytic only furnishes a negative test of truth, a *sine quâ non*: it furnishes no test of the matter of our knowledge. Grant that if there be a painting which could only have been painted by one out of four given painters; then Logic will tell you that if it was not painted by A or B, it must have been painted by C or D; but Logic will not tell you by which. By *Dialectic*, Kant (agreeably, as we shall see in the sequel, to his peculiar theory of understanding and reason) means the erroneous application of the analytical or formal Logic to our knowledge, by way of deciding on its objective truth—its application to things which Logic can never teach. From this practice, all sorts of delusions arose among the ancients and the scholastics. Hence, according to Kant, Dialectic is a “logic of mere appearance” (*ars sophistica disputatoria*). In the *Transcendental Logic*, Analytic inquires into the elements of *à priori* knowledge in the understanding—the forms with which the understanding must clothe all the intuitions of sense, and the principles without which no object can be in any way thought. He here expressly maintains that we can never, without illusion, apply these forms beyond experience. Dialectic, transcendentially considered, is a criticism of the dialectical illusion which arises from attempting to use the analytical elements and principles beyond the objects and limits of experience.

I. *Transcendental Analytic*; under which head are two divisions—the Analytic of Conceptions, and the Analytic of Principles. This Analytic proposes the analysis of all the *à priori* knowledge which the understanding can give us. The discussion concerns only those elements which are pure, not empirical; and which at the same time belong to understanding and thought, not to sense and intuition. All must be strictly elementary, not deduced; and the enumerations must be complete. One part of the inquiry contains all the conceptions; the other, all the principles of pure (or *à priori*) understanding.

1. The Analytic of Conceptions (*Analytik der Begriffe*). The analysis of conceptions is not resolving them (as we do complex ideas) into their constituents, and so making them clear. This Analytic relates directly to the faculty of understanding itself, and its *à priori* use. We must trace the germs of all the pure conceptions as they lie in the understanding itself, until they are elicited on occasion of experience. We must remember that the understanding is not a faculty of intuition; according to Kant, it presents no objects—only sense can do this: but its concep-

tions are such that sense must present objects always according to them. All that the understanding can do is to judge by means of its conceptions. A judgment is a predication, real or virtual—a saying that A is B, or is not B. All acts of the understanding are reducible to judgments, so that it may be defined the “faculty of judging.” Conceptions, as predicates of possible judgments, relate to some representation of an object as yet undetermined. The conception of “body” in general, for instance, is undetermined; but it may be the predicate of a great variety of judgments; for this conception contains a great many representations under it, the very thing which makes it a conception. In this way it can relate to objects, as all conceptions must: thus we can say, for instance, *metal is body*, or *every metal is a body*.

Now, says our philosopher, if we analyse what takes place in the actual exercise of the Logical Function of the Understanding in Judgments (Propositions), we shall immediately obtain all the pure or *à priori* forms or conceptions of the understanding, just as the inquiry into our sensuous faculty gave us the pure or *à priori* forms or intuitions of sense—namely, space and time. We have, therefore, first a Table of all the kinds of judgments. Here all that relates to the matter or topic of the propositions is rejected (as all that related to the matter of the object of sensuous intuition was rejected), and only the form is retained. It will be seen that this Table takes for granted most of the distinctions of propositions as found in the common formal Logic, and adds to them some others of a psychological nature, merely, rather than logical. Now, the functions of thought, in a judgment, says Kant, can be brought under four heads, each containing three *momenta* or divisions, as follows:—

TABLE OF JUDGMENTS.

1. QUANTITY.	2. QUALITY.	3. RELATION.	4. MODALITY.
Universal,	Affirmative,	Categorical,	Problematical,
Particular,	Negative,	Hypothetical,	Assertorical,
Singular.	Infinite.	Disjunctive.	Apodictical.

This Table is given as including all possible judgments. We will explain it to the non-logical student, a little more particularly than Kant has done. The *quantity* of a judgment consists in the greater or less extension of the subject of the proposition—namely, that of which something (the predicate) is said: thus, *all men are fallible*, is universal; *some men are poets*, is particular; *this man (Mr. A.) is a sculptor*, is singular.

The *quality* of a judgment consists in the position of the subject with regard to the predicate—that is, whether it lies within or without the sphere of the predicate: thus, each of the three

bove examples are affirmative; and *no men are perfect, some men are not wise, this man is not an artist*, are all negative. What Kant singularly terms the infinite (*unendlich*) judgment, is not found in the common logic. There would be less of ambiguity in calling it "*limitative*;" and this would exactly agree, as we shall see, with the category of "*limitation*," which is at the foundation of it. This limitative judgment is one which is affirmative in form, though with a negative predicate. Psychologically there is negation, logically there is affirmation: thus, to use Kant's own example, while "*the soul is not mortal*" is a negative judgment, "*the soul is non-mortal*," though affirmative in form, is really *limitative*, for it restricts the soul to the sphere of beings that are not mortal.

The *relation* of a judgment consists in the way in which the terms of it are connected with or subordinated to each other. In the categorical judgment, the terms are connected merely as subject and predicate, without any condition; as, *A is or is not B*. In the hypothetical (conjunctive) judgment, the terms are connected as antecedent and consequent; as, *if A is B, C is D*. In the disjunctive judgment, the relation is that of the logical opposition of two or more propositions, so far as the spheres of the propositions respectively exclude each other: but there is also a "*relation of community*," so far as the propositions make up, in common and altogether, the whole sphere of a cognition; as, *either A is B, or C is D, or E is F, etc.* Kant's example is, *the world exists either through blind chance, or through internal necessity, or through a cause external to itself*. Here each proposition contains a part of the sphere of our possible knowledge in regard to the existence of the world; all of them together contain the whole sphere.* To reject any one of these assumptions is to adopt one of the rest; and to adopt any one is to reject the others.

The *modality* of a judgment consists merely in the "*value of the copula*." In problematical judgments, a predication is made as merely possible; as, *the soul may be immortal*: in assertorical, the predication is made as actual; as, *the soul is immortal*: in apodictical, it is made as necessary; as, *the soul must be immortal*.† In an hypothetical (conjunctive) syllogism,—such as if *A is B, C is D*; but *A is B*; therefore *C is D*,—we have a combination of all the three kinds of modality. The antecedent, *A is B*, is given problematically in the first proposition (major); it is given assertorically in the second (minor); and in the third proposition, which is the conclusion, *C is D* follows apodictically,—that is,

* "*Kritik der rein. Ver., Elementarlehre*," s. 74. Rosenkranz, 1838.

† "*Logik*;" *von den Urtheilen*, § 30.

necessarily; for when once A is B is admitted, it follows that C must be D.*

For the sake of the non-logical and non-metaphysical reader, we volunteer two or three examples by way of further illustrating Kant's whole doctrine of judgments: *all men are mortal* is universal in quantity, affirmative in quality, categorical in relation, and assertorical in modality. *If A is B, C is D*, is (according to what A stands for) individual, particular, or universal in quantity, affirmative in quality, hypothetical (conjunctive) in relation, and problematical in modality. *No circle can have more than one centre* is universal, negative, categorical, and apodictical.

Such is our philosopher's account of the "logical function of the understanding in judgments;" which, as it is connected with the categories, and indeed with his whole theory of understanding, we have dwelt on at some length. These categories (so called from those of Aristotle) are, in fact, pure conceptions of the understanding. They are involved in the above judgments, and they render possible all our cognitions (knowledge) by synthesis,—that is, by the mental process of joining different representations in one notion. Thus, if I say, there is a *tree*, I have a notion which is formed by the putting together into one of diverse representations or qualities which go to make up the notion. The synthesis here is empirical, for I only know the properties of a "tree" by actual experience. The synthesis is pure when the elements which it unites are given *à priori*; thus our notion of a *decade* is formed by a pure synthesis of unities, and unity is one of the pure or *à priori* conceptions of the understanding. Now, says Kant, all that we can possibly say of any object that we can know anything about, we must say in one or other of the ways contained in the Table of Judgments; and from this Table we immediately obtain all the possible categories of thought, or ways in which objects can be viewed by the understanding, which by its pure conceptions must give law to all our possible experience. Hence the categories will exactly correspond with the judgments. There can be no more and no fewer ways in which the understanding can take cognizance of its objects. Kant adopts the term "categories" from Aristotle, though with an entirely subjective

* This is a case of the *modus ponens* of the schoolmen (in which the antecedent is admitted). The case of the *modus tollens* (in which the consequent is denied) would, of course, do as well for the illustration.

The logical reader will notice that, according to a strictly formal common logic, the distinction of modality, or the *matter* of propositions (which Kant has introduced into his Transcendental doctrine,) is extralogical, notwithstanding that Aristotle adopted it in his logical treatises, along with a vast mass of other extralogical things. In this he was followed by his successors. The modality of propositions was one of the most perplexing and useless disquisitions in which the schoolmen engaged. They had a saying, *De modali non gustabit asinus*.

meaning, his design being merely to exhibit the forms of the understanding, or the ways in which objects must, if given at all, be given to it. We request our readers carefully to compare the following Table with that of Judgments, when the correlation of the two will be at once evident. The conceptions which it contains are indifferently termed "categories," or pure conceptions of the understanding (*reine Verstandesbegriffe*).

TABLE OF THE CATEGORIES.

1. OF QUANTITY.

Unity,
Plurality,
Totality.

2. OF QUALITY.

Reality,
Negation,
Limitation.

3. OF RELATION.

Of Subsistence and Inherence (substance and accident).
Of Causality and Dependence (cause and effect).
Of Community (reciprocity between agent and patient).

4. OF MODALITY.

Possibility—Impossibility.
Existence—Non-existence.
Necessity—Contingence.

Our author gives the above as a complete list of all the pure conceptions of the understanding. Only by means of these conceptions can it think any object of sense. All the conceptions arise, as we have seen, from the faculty of judgment, which Kant identifies with the power of thought.* He compares his categories with those of Aristotle, whom he speaks of as having sought for these fundamental conceptions without any guiding principle. Kant, however, here evidently overlooks the fact that Aristotle's categories were objective, his own subjective. Aristotle's enumeration is of objects and their qualities and relations as viewed by the understanding; Kant's is an enumeration of the subjective determinations of the understanding itself, in reference to possible objects.

The classes of conceptions under *quantity* and *quality* are termed *mathematical*; those under *relation* and *modality*, *dynamical*, as having correlates. The former refer to objects of intuition: empirical, as, for instance, *tree*; or pure, as *space*, *time*. The latter refer to the existence of objects, either in reference to each other or to the understanding. Further: in each triad, the third category arises from a combination of the other two. Thus, *Totality* is nothing more than plurality combined with unity; for one whole is constituted of all its parts. Limitation is only reality, joined with negation of the same. Thus, a finite

* Diese Eintheilung ist aus dem Vermögen zu urtheilen, welches eben so viel ist als das Vermögen zu denken. "Kritik," s. 79. Rosenkranz, 1838.

right line has a real length, beyond which there is a negation of further length—that is, the line is limited. Again, in the general category of Relation, we have the relation which exists between things or substances, and their attributes or accidents which inhere in them; the relation between causes and their effects which depend on them; the relation between things which reciprocally act and re-act on each other. Now, here, again, the third sub-category arises from the combination of the other two: for Community or Reciprocity combines causality (as implying the dependence of the effect) with the inherence of causality (as an attribute) in the substance; in other words, Community is the causality of anything in reciprocal determination or agency with something else. Under the fourth head, of Modality, how do we, by combining possibility and existence, obtain Necessity?* and how do we (in the opposites) obtain Contingency from the combination of impossibility and non-existence? In order fully to explain these points, we must more articulately compare the Table of Categories with the previous Table of Judgments.

The correspondence between the judgments and the categories, in the cases of Quantity and Quality, are sufficiently obvious. In Quantity, it is evident enough that *universal* propositions would not be possible without the previous (*a priori*) conception of totality—all. So, *particular* propositions, in like manner, imply the conception of a part, or a number less than the whole—some. And *singular* propositions are founded on the pure conception of unity—one, as this or that individual. We have already remarked that totality is the unity of parts or particulars. In Quality, *affirmative* propositions imply the reality or actuality of the connexion between subject and predicate. *Negative* propositions rest on the conception of negation. *Limitative* pro-

* Kant himself says: "Necessity is nothing but existence, which is given through possibility itself" (*Ed. Rosenkranz*, supp. xii.). If this means that before anything actually exists it must be *possible*, and that being thus first possible, and then actually existing, its existence has now become a necessary fact, which can never cease to be a fact, even though the existing object were afterwards annihilated, we understand the meaning. But we are told by an able student of Kant, that "his meaning is, that a necessary existence is an existence whose existence is given in the very possibility of its existence." Some of our readers will be aware of the Cartesian method of argument, borrowed from Anselm, and remodelled by Leibnitz, as follows: "God alone has this peculiar distinction (*hoc privilegio gaudet*), that if he be possible, he necessarily exists; and since nothing stands in the way of his possibility, this alone suffices for our knowing the existence of God *a priori*" (*Leibnitzii Opera*, *Dutens* ii. 16, 17). Now, we are not here called on to examine the validity of this argument for the Divine existence, but only to remark that it is distinctly repudiated by Kant, who says: "It is a contradiction to introduce—under whatever term disguised—into the conception of a thing which you are to think of solely as to its possibility, the conception of its existence" (*Ed. Rosenkranz*, 465). If, therefore, Kant means to illustrate the category of Modality by this example, he is using for this purpose a theory which he himself rejected.

positions have at their basis the conception of limitation. We have before seen that reality and negation combined amount to limitation.

In the Category of Relation, we obviously see the accordance of the two first sub-categories with the corresponding logical function of judgment. The *categorical* proposition pronounces that some attribute (*accidens*) named in the predicate inheres in (belongs to) the subject—as snow is white, man is an animal; for though, in the common logic, such propositions (except singular ones) are regarded as expressing classes of things, still the predicate (“animal,” for instance) admits of being viewed as expressing a property—animality. In the *hypothetical* (conjunctive) proposition, we find the principles of causality and dependence, or cause and effect; for the existence of the consequent depends on that of the antecedent—as, if A is B, C is D. The *disjunctive* proposition makes its subordinate parts mutually dependent on each other, throughout: either A is B, or C is D, or E is F, etc., means that the whole complex proposition here given is divided into parts which mutually exclude each other, one position only being admitted, whichever it may be. One part is not contained in another, but they are all thought co-ordinately and separately, and determine each other mutually. Hence the basis of the disjunctive judgment is the conception of the reciprocity of certain agencies or co-ordinate positions. We have before shown how Kant makes the sub-category of reciprocity or community arise out of those containing the correlates inherence and subsistence, and causality and dependence.

Under the general head of Modality, we must premise that our author's *problematical* judgment is not peculiar: it is identical with the hypothetical (conjunctive) or the disjunctive judgment, as the case may be. His *assertorical* judgment is, in fact, categorical. His *apodictical* judgment is really the same, but he defines it as expressing logical necessity. Indeed these three judgments of modality are, as we have before remarked, strictly extralogical. The conception of possibility, of existence, and of necessity, are evidently essential, respectively, to each of these three modal judgments. It is not difficult (though Kant has nowhere logically exemplified it) to see how, if we keep close to the Table of modal judgments, we may get necessity out of possibility and existence combined. Thus, the following argument is correct; though the “necessity” of the conclusion is only the same as that of any other syllogism: If A is B, C is D; A is B; therefore C is D. Here the possibility of C being D, combined with the assertion that A is B, gives the necessary conclusion that C is D, which follows apodictically from the premises in the ordinary way.

But how shall we obtain the opposite of necessity—namely, *contingency*—from impossibility and non-existence combined? We see no way at all (and certainly Kant has indicated none) in which the conception of contingency, which is closely allied to that of possibility—the possibility of an event really happening—can arise out of the union of the conceptions of impossibility and non-existence: German philosophy had not, up to the time of Kant, attained to a dialectic quite so subtle and Hegelian as thus to transmute nothings into something. Our author himself has not even intimated that the category of modality was to be dealt with in the way of syllogism, in order to illustrate the general principle that each third sub-category arises from the combination of the other two; yet it is in this way only, so far as we see, that the third sub-category can be obtained, at least in the case of the second members, in the Table of Modality. We offer, therefore, the following argument, which is founded on the laws of hypothetical (conjunctive) propositions: If A is B, C cannot be D (impossibility); A is not B (non-existence), therefore C may or may not be D (contingency); in this way, contingency results, in the conclusion—if conclusion it may by courtesy be called, where formally there is none—and this result arises from the combination of the premises.*

We must defer, for the present, Kant's further remarkable developments of his Categories, and any criticisms we may have to offer on them, and on his doctrine of the understanding in general.

* The reader who is ever so slightly imbued with logic, hardly needs to be reminded, that, in conjunctives, if the antecedent be granted, the consequent is inferred (*modus ponens*); and if the consequent be denied, which is the same thing as granting its contradictory, the contradictory of the antecedent is inferred (*modus tollens*): but the affirmation of the consequent, or the denial of the antecedent, authorizes us to infer neither of the alternatives. For instance—to give a familiar illustration, which will speak for itself: from saying of a man: if he has a fever, he is ill; but he is ill; we cannot infer that he has a fever, for he may be ill from some other disorder. And from saying, if he has a fever, he is ill; but he has not a fever; we cannot infer that he is not ill, for the same reason. In the former case, he may have a fever or not, for anything that the premises contain; in the latter, he may be ill or not—all is left in uncertainty and contingency. The latter example corresponds with the one in the text.

Psychological Quarterly Retrospect.

THAT instant intelligent rapidity of correspondence with far-distant regions, which in popular mythology is a vain imagination, has become in our own days an accomplished fact. The most rapid flights of the "dainty Ariel" have been for some time emulated on the land, and, indeed, slightly also at sea; but now science has outvied that most exquisite spirit, in the passage even of the very ocean in which lie the "still vexed Bermoothes," and we may hopefully look forward to a period (it may be in our own life-time) when the boast of Puck—

"I'll put a girdle round the earth
In forty minutes"—

shall be effected by more legitimate and trustworthy, although less immaterial agency.

A little before sunrise on the 5th of August, the American termination of the Atlantic telegraph cable was landed in the Bull's Arm inlet of Trinity Bay, Newfoundland, and the deflection of the magnetic needles, attached to the termination of the cable immediately afterwards, showed that a communication had been established between the Old and New World. Notwithstanding that we have become familiarized with the working of the electric telegraph over wide-extended districts of the country, and even across narrow arms of the sea, the successful extension of upwards of two thousand miles of telegraphic cable, and the completion of an electric communication between two continents separated by a vast ocean, are achievements the importance of which, from their unparalleled character, it is difficult as yet rightly to estimate. The scene which occurred on the American shore, when the bond was completed between the two worlds, fitted well, in its solemn gravity, the great enterprise that had been accomplished. An eye-witness thus describes the landing of the cable:—

"At five o'clock, a.m., boats were lowered, and, accompanied by nearly all the officers and a great number of the crews of the ships, the cable was safely landed. By six o'clock the cable was in the telegraph station, and was no sooner connected with the instruments than a current of electricity was received from the *Agamemnon's* end. The landing had been performed without any cheers; officers and men fell in, in two rows, with the cable between them—the chiefs of the expedition in the van; it was thus dragged, or rather carried, to the station. Men now looked at one another as if they could scarcely realize

the fact of the great work being accomplished. On every face the most intense relief and delight was depicted, and all felt it was now their duty to offer up their tribute of prayer and praise to that Supreme Power who had hitherto guided and blessed their efforts. All being assembled in front of the station, Captain Hudson" (taking up a position, according to another writer, "on a pile of boards, the officers and men standing round amid shavings, stumps of trees, pieces of broken furniture, sheets of copper, telegraph batteries, little mounds of lime and mortar, branches of trees, huge boulders, and a long catalogue of other things equally incongruous,") "delivered a short address, impressing on his hearers that the glory belonged not unto them, but unto Him who rules the raging of the sea, and holds the waters in the hollow of His hand. Prayers and psalms of thanksgiving were then read, after which all returned to the beach. Three such cheers now burst forth as none but English and American sailors can give; the hills and woods around echoed again and again, the crews of the ships joining in. The *Gorgon* fired a royal salute of twenty-one guns, with American and English ensigns at her mastheads."

Little needs adding to this simple yet grand picture of what will probably prove to be the most important event of the present period. It would be idle to speculate upon the political effects which may result from the junction of this country with America. That junction must lead to a closer union in the commercial and social intercourse of the two countries; and we doubt not that the closer these bonds are drawn, in proportion also the political union will become firmer.*

While science has, however, been putting to shame one of the most familiar attributes of the mythical personages who figure in our folklore, and leaving immeasurably in the rear the vapid vaticinations of modern clairvoyants, the old leaven of popular mythology has not failed to crop out from time to time in different parts of the country. The *Times* of September 2nd records the following instance of belief in witchcraft:—

WORSHIP STREET.—Sarah Macdonald, a middle-aged woman, living in Cudworth Street, Bethnal Green, was charged before Mr. D'Eyncourt with obtaining various sums of money under the following extraordinary circumstances:—

Mrs. Mary Anne Gable, a lady-like woman, dressed in mourning, and whose wan and anxious features plainly showed much mental and personal suffering, stated,—My husband is a coppersmith in Russell Street, Stepney, and having had a deal of trouble and illness lately, I heard and was convinced that a spell had been put upon me, and on the 23rd of last July I determined to go to the house of this woman, and did so.

Mr. D'Eyncourt.—But why did you go to her?

Witness.—Why, sir, she lays out the cards, and, indeed, is very clever with them. I had heard that she was clever in that way before, but I had not found that she had the power of relieving persons from torment by burning powders till then.

* The recent cessation of electric communication with Newfoundland from a defect, as yet inexplicable, in the Atlantic Telegraphic Cable is discouraging, and a free transmission of messages may be deferred for some time longer, if, indeed, it does not prove that the present cable is permanently injured. The thorough practicability of an electric communication between America and England is, however, now fully demonstrated, and it remains to be seen whether or not the mechanical difficulties can be overcome without involving a ruinous expense.

fr. D'Eyncourt.—Why, what was the matter with you?

Witness.—Why, sir, I had such frightful pains, all cutting, shooting, prick- and darting through my head and body.

fr. D'Eyncourt.—Why did you not go to some medical gentleman about pains you speak of?

Witness.—I did, sir; I was under Dr. Ramsbotham, and I asked him if he did think they were caused by a spell; and he said, no, he thought not. He gave some medicine, and for some time I got better; but I afterwards became worse from the pricking, and then, as I told you, I went to Mrs. Macdonald. She said, "You appear very ill," and I told her that I was. We had some conversation about it, and she then told me that a person was doing me an injury, she said, "If you have some of my powders, they will relieve you, but they sixpence apiece." I told her, of course, that I did not mind that, and she therefore burned ten of them.

fr. D'Eyncourt.—Then, she did not give them to you to take home?

Witness.—Oh, no, of course not. She put them into the fire before my face, they all crackled, blazed, burned, and bounced.

fr. D'Eyncourt.—What object did she say they were intended to effect?

Witness.—Oh, she said they would torment the person who was injuring me.

fr. Safford, the clerk.—And did you feel any better from the powders being ministered in that way?

Witness.—Oh, yes, I did feel better; but, mind, I don't believe that it lies so much in the powders as in the words she uses. I think it's what she says when she burns them that does you good.

fr. D'Eyncourt.—Indeed! then what were the words she said?

Witness.—Oh, I don't know; she took care that I should not hear those, or of course I should be as wise as herself. She did not even mutter them.

fr. Safford.—Then there was no incantation?

Witness.—Why, no.

fr. D'Eyncourt.—Well, then, have you brought her here because you felt her, or what?

Witness.—Oh, no; I feel worse again—worse every day. I only felt better first time I went. The fact is, that I have a relative who is coming into a great property, and she wants to get rid of me; so she goes to Mrs. Macdonald and has powders the same as I do, and of course they torment me whenever Mrs. Macdonald burns them for her. She knows that's true, too, for when another time she told me that the knowledge got made her so ill that she has been obliged to leave her husband's side in the middle of the night and use a powder to get rid of the torments that she herself suffered from.

fr. Safford.—And how often did you go to her?

Witness.—Oh, seven or eight times, I should think.

fr. D'Eyncourt.—Did you ever tell your husband about these visits?

Witness.—No, certainly not; I did not want to tell him my troubles; he has plenty enough of his own, I dare say; at least, if they are anything like mine.

fr. D'Eyncourt.—And who told you so much about witchcraft?

Witness.—Well, sir, we all know that there is such a thing, of course.

fr. D'Eyncourt.—Pray, where were you brought up?

Witness.—In the parish of Bethnal Green, sir; my father was a timber merchant, and had large property.

fr. Safford, the officer.—The complainant's daughter is also present, sir.

fr. D'Eyncourt.—Then let her stand forward.

A pretty buxom girl of 18 here got into the witness-box, and on being sworn said,—My name is Eliza Gable. I have been to Mrs. Macdonald's house several times, both with my mother and alone. When I first went there she said to a dark woman was doing us a great injury, but that she would put a stop to it. She described the dark woman, and she corresponded exactly with the

relation we suspected. I have given her sums of money at different times, sometimes two shillings, sometimes one, and sometimes only sixpence.

Mr. D'Eyncourt.—Why, you look very well; what is it that ails you?

Witness.—Oh, I have suffered very much from her spells; I have very bad symptoms, I can't rest or sleep, and I feel as though I could fly out of the place. I believe that she is a witch, and has got the power of making spells.

Mr. D'Eyncourt.—And what did she do for you?

Witness.—Oh, why, she burned the powders, but they didn't do me much good. I believe that she can assist us if she likes, but that she won't.

Mr. D'Eyncourt (to the officer).—Have you any knowledge as to these complainants being respectable persons?

Horton.—Oh, yes; very, sir.

Mr. D'Eyncourt.—Are there many persons in Bethnal Green who believe in the prisoner's powers?

Prisoner.—They believe that I can bewitch the dead, but I can't.

Horton.—There are a great number, sir, who believe this, and I believe that the prisoner bribes several people to circulate the report. I apprehended the prisoner in her own house. I searched the place, and found these cards (about a pack in quantity, but of various colours and marked backs), and I also found the three powders I now produce.

Prisoner.—The children played with the cards, nothing more, and as to the powders, they are only salt. (The powders were opened, examined, and tasted, and seemed to be only what the prisoner said they were, common salt.) Mrs. Gable came to me and complained, but I told her from the first that I could not help her, and that she had better go elsewhere.

Mrs. Gable.—Yes, you told me so at last, because you found that you got more money from the other party than you did from me.

Prisoner.—She declared that she would sell her gown off her back rather than go without a powder. Even this very morning the daughter came to my house, threw a shilling down on the table, and said her mother had sent it for my great goodness to her. I told her that I had no power to help her mother, whose case really was a very bad one.

Mr. D'Eyncourt.—Well, I am truly surprised that a mother and daughter, who are not only respectable, but in other respects reasonable people, should be so very foolish.

Mrs. Gable.—Yes, I was indeed foolish to part with my money before she made the powders do me any good. I can't get any sleep.

Mr. D'Eyncourt.—How such simple notions can be entertained I cannot possibly conceive. There is no doubt, however, that the prisoner has been reaping a rich harvest from this kind of weakness, which I must put a stop to, and, though I shall now remand her, if upon inquiry what I strongly suspect should prove to be the fact, I shall send her to the House of Correction.

A lingering belief in popular superstition exists to a much wider extent among the population of this country than is commonly supposed. This belief is not only manifested from time to time by instances similar to that recorded above, but its influence is also witnessed, and that more extensively, in wide-spread superstitious delusions which ever and anon prevail. "Table-turning" and "spirit-rapping," regarded as results of supernatural agency, are familiar examples of delusions in which this lingering faith in common superstition is shown. "Table-turning" would appear to have been absorbed in spirit-rapping, and although this latter delusion is not manifesting, at present, much vitality in

England, it thrives with tolerable vigour in some parts of the Continent and in America. A highly favoured "*medium*" in Frankfort has of late been in communication with the spirits of Cæsar, Cleopatra, Homer, and Hippocrates, and he has not only obtained a fac-simile of the handwriting of each spirit, but Hippocrates has also given him a prescription, by the aid of which an old lady on the Rhine has been cured of acute rheumatism! In America "spirit-rapping" has for some time had the rank of a religious belief, forming one of several professions of faith which have been developed in that country within a short period; which ignore Christianity altogether; and which exhibit some of the most singular psychological phenomena that have ever been witnessed in the history of a people. The leaven of superstition which lies at the bottom of "spirit-rapping" determines those scions of the New World who have faith in it, to kick aside, with the ready restiveness of the political dogmas holding sway over them, the trammels of an Old-World faith; but the same leaven of superstition in the Old World is consistently had recourse to in order to strengthen the bonds of Christianity! We have scarcely recovered from the vision of "Our Lady of Salette," when we are threatened with another official visit of the Virgin in France. But let a correspondent of the *Times* (August 26th) tell the tale:—

"Well may the Parisian be proud of his metropolis; she stands alone, and need fear no rival.

"Yet with all the undoubted evidences of intelligence and enlightenment around, there is still a strange mixture of irreligion and superstition, which cannot be too deeply deplored. On Sunday, the 15th inst., the day of the Fêtes Napoleon, sparse indeed was the attendance at the various churches, while thirty-four theatres were crammed to repletion. At the present moment, a subject which in England would at once be scouted by rational men is here seriously discussed, and is implicitly believed in by millions. It is a miracle, or rather a series of miracles, which are reported to have been going on for some time in a grotto near Lourdes, not very far from Pau, and in the diocese of Tarbes. So much noise has the affair made in the south of France that the diocesan has formally appointed a commission to inquire into the circumstances.

"The story, it will be seen, is little more than a repetition of that of Notre Dame de Salette and the little cow-boys, but the following is the statement quoted from a recent ordinance of the bishop:—

"Bernadette Soubirons, a young girl of Lourdes, thirteen years of age, has been favoured with visions in the grotto of Massavielle, at the east of the town. The immaculate Virgin has appeared to her; a fountain has sprung up (*surgit*) on the spot; the water of this fountain, applied either internally or externally, has effected many cures; these cures are reputed miraculous; people from our diocese and elsewhere have come in crowds, and are still thronging to the spot, requesting to be favoured with this water for the cure of various maladies. The attention of the civil power has been called to the matter, and on all sides, since the month of March last, the ecclesiastical authorities have been applied to for an explanation of these improvised pilgrimages."

"The bishop proceeds to say that for his part he hardly thought it ripe for

inquiry, but that his judgment has been overruled. There are, he adds, three classes of persons who appeal to his decision—those who look upon the whole thing as a cunningly devised fable and juggle; but, in the opinion of this worthy man, to deny the possibility of these supernatural occurrences would be to adopt the teachings of a superannuated school, and to revert to the infidel philosophy of the last century. Another class prudently suspend their judgment until competent authority has given its decision, which they await with anxious expectation. The third denomination includes those whose conviction of the genuineness of the apparition is already formed, and who, accordingly, hope for an announcement from the Church favourable to their pious sentiments.

“‘For the purpose, therefore,’ continues the prelate, ‘of enlightening the minds of so many thousands of the faithful, we invoke the aid of Heaven to explain facts of the highest interest to the faithful aforesaid—to the worship of Mary (*la culte de Marie*), and to religion itself, and we hereby appoint a commission to inquire into all the circumstances.’

“The document is rather prolix, comprising eight ‘articles,’ the last directing the commission to commence its labours forthwith, and to meet as often as may be deemed necessary. It bears the signature of ‘Bertrand, Sre., Bishop of Tarbes,’ and the date of the 28th of July last. The commission, consisting of the deacons of the diocese, M. Nogaro (*chanoine-archiprêtre*) officiating as president, and M.M. Tabariès and Soulé as vice-presidents, with a secretary and two vice-secretaries, and aided by scientific men, has already held several meetings, at which extraordinary revelations have been made by witnesses examined upon oath, and the result of their inquiry is looked for with an eagerness which would scarcely be credited in Protestant England. Meanwhile, pamphlets, comments from the press, and vehement discussions are rife, and the neighbouring provinces are in a ferment. How it will all end a few weeks will suffice to decide. Something, perhaps, may be hoped from the common sense of one at least of the clergy engaged on this inquiry, who, in reply to a deputation of his parishioners, requesting him to consecrate a tree of liberty for them—the thirtieth they had asked him to bless—is said to have replied that it was somewhat inconvenient to be continually called away from his other duties to perform this ceremony, more especially as the trees usually died; he therefore suggested that they should adjourn to the nearest nursery-ground, when he would bless every tree in it once for all, and they would thus have a stock of consecrated timber to draw upon at will.”

It would be difficult to estimate whether the “spirit-rapping” of America or the saint-visions of France exhibit the most pitiable spectacle. Whatever intermediate agencies may come into play in the development of these popular delusions, *ignorance* is at the root of the matter, and it is this which is either worked upon, or out of which the delusion arises spontaneously. We may not so readily exhibit such gross instances of religious delusion in this country as are witnessed in America and France, but we must not lay too great unction to our souls on account of this. The taint of a delusion is at least sure to rest upon us. There is, we believe, a chapel of “Our Lady of Salette” in England. We have had a tolerably wide, although mild epidemic of spirit-rapping; but the outbreak of table-turning among us was of a serious character, and to one or two of our clergymen that epidemic was indebted for the gloss of its Satanic character.

Mormonism has a hold among us (and some of its moral peculiarities have recently been exhibited in the metropolitan police courts), and we do not want other-isms of very doubtful morality, and certainly deficient of any Christianity whatever.

The great centre of Mormonism in the Utah territory has, after a brief rebellion, been brought within the jurisdiction of the United States. The *Times'* correspondent in the Great Salt Lake City remarks, concerning the peace which has been concluded between the Mormons and the States, that "the Government has succeeded in effecting something which they call a peace, but which will prove to be a mere repression of the moral ulcer, to be followed at no distant day by a reaction far worse than the original disease." The same writer gives the following highly interesting particulars respecting the two principal leaders of the Mormons:—

"I called upon Brigham Young. I found him a well-presented man of fifty-seven years of age, of medium height, of figure rather inclined to corpulency, with sandy complexion, and a vulgar sensual mouth. He was well, but plainly dressed, rather austere in manner, and evidently fully conscious of the necessity of maintaining a sort of royal dignity, becoming a prophet. I should judge him to be shrewd in worldly affairs, a good business manager, a judge of human nature, and capable of adapting it to his will. The cast of his mind, however, is evidently low and vulgar. While shrewd and cunning, quick and ready in the application of what powers of mind he possesses, the prophet is by no means a wise man nor profound; and in discussion with an ordinarily skilful opponent he fails utterly. Nevertheless, his power over the people is limitless. His nod is law; and the ignorant masses of his followers look upon him as almost a God. I had the pleasure of hearing him deliver a sermon on the Sabbath, in the course of which he quite satisfied me that I was not mistaken in my estimate of his mental calibre. His discourse was rambling and vulgar, although his manner was popular and forcible. He never rose to the dignity of an argument, but all his positions depended for success upon the blind acceptance of his own dicta. He referred to the army of the United States as ruffians, and then made a lame effort to cover up the blunder he had sense enough to perceive that he had perpetrated. He spoke of the President of the United States as 'an old dotard, whose friends allow that he ought to have been elected twenty-five years ago, when he had a little sense about him, if ever;' and in urging the 'sisters' not to hurry their husbands back to their homes, told them, if it made their heads ache to live in tents, to 'go out and get a chip to put on their heads.' This specimen is quite sufficient to satisfy and disgust every intelligent reader. Judge what must be the misery of an educated and refined proselyte to Mormonism, who comes here as to a heaven upon earth, and finds the prophet, the vicegerent of God, a man of such vulgarity as the above language marks him.

"But Brigham is a model of elegance and refinement compared with Heber C. Kimball, the next in the priesthood. He is only a few days older than Brigham, is tall, full formed, with short sandy hair and whiskers, florid complexion, and small, cunning, snake-like black eyes. No one knows with certainty how many wives Brigham has, but Heber pleads guilty to about forty, by whom he has only about fifty-eight living children, having lost half-a-dozen. His reputation as a husband and father is bad, and many are the secretly-whispered tales of his jealous cruelty to his wives, some of whom are

younger than his first-born child. He is certainly the most vulgar and blasphemous wretch it has been my misfortune to meet. Excepting the use of the name of God, there is no form of blasphemy which is not familiar to his lips. He assured me that he loved his friends and not his enemies. Being rebuked for this sentiment by a Gentile bystander, he declared that he followed the Scripture, nevertheless, and prayed for his enemies. This sentiment elicited commendation, when Heber continued—'Yes, I pray they may all go to h—ll and be damned.' This, let me assure you, is a fair sample of the style of language employed by this second member of the priesthood, in the pulpit and out of it. Another illustration of his spirit, and I leave Brother Heber. He was asked if he would resent an insult by violence; and he responded, 'The Scriptures tell us that if smitten upon one cheek we must turn the other also. Well, I'll do that; but if a man smites me on the other cheek too, let him look out for a — of a lick back!'"

Unsatisfactory as the morality of Mormonism may be, it is fated to be outdone. An American correspondent of the *Times* (July 12th) writes as follows:—

"Persons dissatisfied with the rest of the world, and admirers of themselves, have just been gathered together under a canvas tent among the mountains of Vermont, with an explosion of gasconade ribaldry and lasciviousness that puts Brigham Young to the blush and Mormonism in the shade. Marriage is denounced as the cause of the slavery and degradation of woman, whereby she loses the control of her name, her person, her property, her labour, her affections, her children, and her freedom; and a pretty delegate from New York—representing what department in our Babel I cannot say—on 'the sunny side of 30,' with pretty curls, bewitching smile, sparkling eyes, and sweet elocution, held forth upon this text in a speech that fills a column and a-half in the morning journals. She treated her subject *con amore*, but in language that will hardly bear transcribing. Discontented minds of every sort were there represented, complaining,—some of the restraints of the marriage tie, some of the weight of the Church and religious institutions, some of the sin of slavery, some of the unjust distribution of property—all of the sinful mote in the eyes of offending friends and strangers, none of the beam that was blinding their own vision. Two or three times a-year there has to be just such a 'stampede' of 'isms.' The public is amused or shocked, according to its fancy, and the spread of these peculiar tenets is effectually checked by the absurdity of the display."

A parallel to these socialistic doctrines may be found in France. The Paris correspondent of the *Standard* writes (June 28th):—

"The tribunal of correctional police of Lyons has at length pronounced its verdict in the affair of the secret society detected in that city many months ago. Thirteen individuals were arrested, but many of the suspected parties succeeded in gaining Switzerland and Savoy. Eleven of the accused were condemned to terms of imprisonment varying from one to two years, and to small fines; the remaining two were acquitted. One of the prisoners, named Bernard, while on his defence, indulged in the following abominable language:—'Yes, gentlemen, I am an atheist. I proclaim it aloud. Society will crumble, for it is organized in an abominable manner. Incest is not a crime. Were brothers permitted to marry their sisters, you, gentlemen of the bench, would have less occupation, for there would be a less number of assassins and thieves, consequently less crimes and offences.' This amiable specimen of the French Socialist concluded his defence thus: 'The best proof that I do not belong to

any secret society is that I have given you my word of honour to that effect.' The scamp was sentenced to one year's imprisonment and 100*l.* fine."

It is a curious and at the same time most instructive psychological study, to witness the development of the popular delusions of our own time. We may discern the same essential principles at work as are seen in the delusions of remoter periods, but in addition we may mark the impress of the peculiar social or scientific tendencies of thought which more particularly characterize the present period. The popular delusions of our own day, indeed, grow from roots similar to those of the delusions which held sway in the mediæval and earlier ages, but they have a new guise, and one more befitted to the existing tone of thought. The disposition which still exists so widely to entertain the various social, religious, and pseudo-scientific delusions, which have cropped out from time to time during the last twenty years, provokes an inquiry into the *quality* of the education which is dealt out to the middle class; for we are inclined to attribute the persistence or origination of popular delusions more to the defective knowledge of this than of any other class of society. It has long been believed that the education of a very large proportion of the middle class is not of the good quality which might have been expected from the great efforts which have been made in recent years for the better instruction of all classes of society. The late Oxford examination of "Persons not Members of the University," has shown some of the deficiencies of middle-class education in a very strong light. In a leading article, the *Times* sums up the general result of this examination in the following language:—

"The first barrier was the preliminary examination, and it ran upon matters commonly supposed to be taught to a young gentleman by his governess and a village tradesman's son in the first-class of a national school, but seems to have proved fatal to half the rejected. The preliminary examination was in orthography, writing, analysis and parsing, arithmetic, geography, English history, and English composition. If some of these subjects were a little higher than the ordinary scope of a village school, at least the 'Commercial Academy' ought to teach them. However, it appears that though half would have been rejected anyhow, half would have got through, and many of them would have obtained honours but for this little difficulty. This is so remarkable a fact that it calls for the explanation of those who talk of the diffusion of knowledge and the success of the voluntary system. No doubt much may be said, and, indeed, much does occur, to throw light on this singular phenomenon, but we should like to know what is said. A candidate for this examination must have not only some degree of confidence, but also some credit with his friends. We assume that he is seldom such a one as his school would disown, and that his friends have looked kindly and hopefully on his attempt at university distinction. Yet he cannot write good English; he makes mistakes even in his spelling; he breaks down in the first four rules of arithmetic. If he were engaged as a steward, a butler, or a head-gardener, he would betray his ignorance on the first occasion he had to write a letter to his

master or send in an account. He might use very fine words; he might have an immense horticultural vocabulary; he might even talk volubly and grandly; but put him down to pen, ink, and paper, and his grand words would be ill spelt, his constructions would defy syntax, his letter would jump from one person to another, and even his figures would be untrustworthy. There would be serious errors, of course in his own favour, for otherwise a poor man could not leave them undetected in his monthly or yearly accounts. If such a man were appointed to a school he might go on for a long time without detection, he might never be detected, and he would go on teaching bad spelling, bad grammar, confusion of thought and ideas, bad reasoning, and bad arithmetic all his days, till he had sent out into the world several hundred obstinate block-heads or conceited fools. So we cannot doubt that the application of the Oxford test has been very salutary in this instance; that it was wanted; that the result justifies the wisdom of the so-called Middle Class Examination; and that, as the examiners sharpen the test, which they promise to do, they will find the candidates better qualified to stand it. . . . Looking, then, to the general results, the most remarkable, as it seems to us, is the fact that, when five-eighths could not pass the preliminary examination, more than two-thirds of the whole, above eight hundred, volunteered the examination in the 'Rudiments of Faith and Religion;' and of these a very small proportion failed to satisfy the Divinity Examiners, while the greater part are said to have passed creditably. In the middle class, therefore—the class which cannot afford an Oxford education, and is not too proud to seek its testimonials—there appears to be more religious than common information. The failure is in writing, grammar, arithmetic, English history, modern geography, and such matters supposed to be known by everybody one meets—*not* in doctrine or Bible history. This was to be expected, perhaps, from a body of candidates sent up from our village schools; but we were not quite prepared to expect it from any higher class. There appears to be some difficulty in the working of this part of the scheme—at least, the schoolmasters find one—and an alteration is expected. The honours have fallen very naturally to good grammar and proprietary schools, and there cannot be a more desirable result than that these schools, conducted by able and hardworking men, and under good management, should have this testimony to their merits. But the crop of honours has been shared by evening classes and institutes. That, too, will work well. There are, happily, many ways in which a man may improve himself. Indeed, where there is a will there is always a way. But one way is better than another, and it fairly belongs to such a body as Oxford to show the best way."

The results of the voluntary examination in the "Rules of Faith and Religion" are certainly somewhat surprising, although gratifying, and it is to be hoped that they will prove a "shadow of good things to come;" for it is only as the moral and religious standard of the middle class is raised, that we may hope for improvement in the morality of the lower classes.

We may not, in jotting down those items which indicate the psychological tendencies or phenomena of the quarter, discuss the causes of that defective education which prevails too extensively among the middle class; but the following anecdote, told by a recent tourist in Skye, shows well *one* cause which we believe operates very generally in the education of all classes of society:—

"One little incident we must mention, as illustrating education. Walking to church one Sunday in Skye, we were followed by a slip of a lad some ten or

eleven years of age, who, on putting some questions to him, volunteered to name all the capitals in Europe, which he did with marvellous dexterity. From Europe he crossed to South America, and rattled out the names of the capitals with the accuracy of a calculating machine. From South America he started off to Asia, and finally brought up at Jeddo in Japan. We were rather sceptical as to the value of such acquirements, and, indeed, as to the reality of any information having been conveyed to the lad's mind by the formidable muster-roll of words that had been stuffed into his mouth. We therefore asked him, 'Can you tell us the name of the island you live in?' But, notwithstanding his lore, he had not learnt that he lived in the Isle of Skye. To make quite sure of the fact, we requested the captain of the steamer to repeat the question in Gaelic; but there was no Skye forthcoming. He knew the name of the parish, and of all the capitals in the world, but not of the island he lived in. There being a schoolmaster present accidentally, we thought the occasion too good to be lost, to show the worthlessness of word stuffing, and ventured another question. 'Now, my lad, you have told us the names of nearly all the capitals in the world; is a capital a man or a beast?' 'It's a beast,' said the boy, quite decisively. So much for words without understanding. In the next school inspection that boy will probably pass for a prodigy, and will figure in statistical reports as an example of what good education can do."—*Glasgow Commonwealth*.

"Avarice, after the description of Seint Augustine, is a likerousnesse in heart to have erthly thinges. Som other folk sayn, that avarice is for to purchase many erthly thinges, and nothing to yeve to hem that han nede. . . . The difference betwene avarice and coveitise is this: coveitise is for to coveit swiche thinges as thou hast not; and avarice is to witholde and kepe swiche thinges as thou hast, without rightful nede." Here is a rare comment upon this paragraph of Chaucer's "Persones Tale":—

"Ye who listen with credulity to the whispers of vanity, and pursue with eagerness the phantom of a name, attend to the history of one richer than Rasselas—even to the history of one Peter Thellusson, late of the city of London, merchant. It is partly detailed in the columns of our this day's Law Report, but scarcely plainly enough to be understood without labour by non-legal minds.

"It is now sixty-two years since Peter Thellusson took stock of his worldly possessions, and found that he had 600,000*l.* in money, and land of the annual value of 4500*l.* Peter Thellusson had satisfied the ordinary ambition of an English *bourgeois*—he had founded a family. Peter Isaac, the son of his youth and the prop of his house, was heir to 35,000*l.* a-year in money and land, and might claim to be a born gentleman. Peers and peeresses might hereafter spring in intermediate succession from the loins of that denizen of a dingy little back parlour behind the Bank. The best men upon 'Change envied the rich and prosperous Peter Thellusson, who had no object of ambition unsatisfied. Peter was of a different mind; he had not nearly money enough. Let other men be satisfied to found one family; Peter was lucky enough to have three sons, and he would found three families. It was not that he loved his sons, or his sons' sons; but it was the hope and desire of this magnificently posthumous miser to associate his name in future generations with three colossal fortunes. If he did not love his sons, he did not hate them; he was simply indifferent to everything except to his one cherished object. Peter Thellusson took the very best legal advice, and made a will. He left a few trifling legacies, probably to show that no unnatural antipathy to his children tainted that will with mania.

But his great fortune was all conveyed to trustees. It was to accumulate until every man, woman, and child of the offspring of Peter, and alive or begotten at the moment of Peter's death, should also be defunct. No one of the children or grandchildren who had ever looked Peter in the face, or trembled in his presence, or squalled at the sound of his harsh, hard voice, should ever be the richer for Peter's wealth. 'And the rich man also died.' Twelve months after making this will, and sixty-one years from the present time, Peter was gathered to his unknown fathers. The will was opened, and created sensations which vibrated through the land in widening circles. Our law books picture to us the blank disappointment of the then living relatives, the gentle cachinnations of a past generation of lawyers, and the gaping wonder of the general public. There were three sons and six grandsons of this malignant old merchant then alive—all destined to live the life of Tantalus; to see this great pagoda-tree growing up before them, yet never to pluck one unit of its fruit. The terms of the will enjoined, that when the last survivor of all the nine children and grandchildren should yield up his breath, then the charm was to end; the great mountain of accumulated wealth was to be divided into three portions, and one-third was to be given to each of the 'eldest male lineal descendants' of his three sons. Having thus done what he liked with his own, and excluded all his living progeny from all benefit, he ends with a whine to the Legislature worthy of Shylock appealing against mercy—he had earned his money with honesty and industry, and he hoped the Legislature would not alter his will. Of course, the first thing that followed was a Chancery suit of the fattest bulk. The common-sense view of the case would have been to set aside the will as the product of a diseased mind—a mind rendered morbid as to its disposing powers by dwelling upon an irrational object. But Lords Loughborough and Alvanley and Eldon, and judges of kindred sympathies, seem to have been led by their love of art to admire the skill with which the technicalities of our blessed real property law had been adapted to the object of this old trader. Perhaps, also, they saw something eminently sane and matter-of-fact in this good old sordid vice of accumulation, or were excited to admiration by seeing the meanest vice of man expanded into something like sublimity in its gigantesque proportions. The litigation went up to the House of Lords, and the will was confirmed. This affair naturally made a great noise. The Legislature took it up, and, although they would not set aside the will by an *ex post facto* law, they branded Peter Thellusson's memory with the imputation of 'vanity, illiberality, and folly;' and enacted by statute 39th and 40th of George III., cap. 93, that the power of devising property for the purpose of accumulation shall be restrained in general to twenty-one years after the death of the testator. Persons of an arithmetical and statistical turn of mind also occupied themselves with the matter, and with the aid of life-insurance tables and Cocker, they calculated that this fund, accumulating at compound interest, could not amount to less than nineteen millions at the moment of distribution, and would very probably reach the tremendous figure of thirty-two millions. But 'nothing is so false as facts, except figures.' The calculators had forgotten to take account of that unknown quantity which must, in practical matters, be represented, not by the letter '*x*,' but by the word 'litigation.' Contemporaneously with the Chancery suit to set aside the will there was a cross-suit to have the trusts of the will performed under the direction of the Court of Chancery. That suit is now sixty years old, and, although children and grandchildren are dead, the suit is as hale and lively as it was in their earliest youth. That suit was the true heir to Peter Thellusson, and it is still spending his money like a frolicsome young cornet. Necessarily, there were other suits. There were suits about post-testament acquisitions of real property, there were suits about advowsons, there were suits about other matters, so numerous that even equity lawyers, not stingy of their words, are fain to

describe them as 'various.' The careful and improving management of the Court of Chancery has also exercised its influence upon this estate. The Yorkshire estates have participated in that excellent system, which has been so uniform in its action, that when we see a house all windowless and unpainted, tottering and decaying, we can predicate with a tone of undoubting conviction, 'That property is in Chancery.'

"The last survivor of the nine lives died in February, 1856, and four new bills were immediately filed. The property is now to be divided, not into thirds, but into moieties. There is, however, a question raised as to who is entitled. Who were the eldest male lineal descendants of old Peter Thellusson in February, 1856? There are two who are eldest in point of lineage, and two who are eldest in point of personal age. This point is still *sub judice*. It would not be very difficult to guess how it will be decided; but that is no matter of ours, nor would it have been a matter of the least interest to old Peter Thellusson. His object was to make the heap very large; he evidently cared not one lock of wool as to which of his descendants might be the possessors. The public interest in this long line of litigation is confined to its general aspect. Peter Thellusson's clever scheme has turned out a foolish failure. No single Thellusson will stalk over the land, overshadowing our dukes and crushing our barons by the magnitude of his territorial possessions. No thirty-two millions of money are expanded into broad acres, where men may travel and say—'Behold the conquests of the great Peter Thellusson.' Whether Lord Rendlesham and Charles Sabine Augustus Thellusson divide the estate as the eldest in lineage, or whether Thomas and Arthur take as eldest in years, we should equally desire to be able to call up old Peter Thellusson to see the division of his anticipated accumulations. The Court of Chancery has so clipped and pollarded his oak, that it is not much larger than when he left it. It would be fit punishment for that purse-proud, vain, cruel old man to see that he disinherited his own children only to fatten a generation of lawyers; that he was the dupe of his own subtlety, and that his name, instead of being associated with the foundation of a house of fabulous wealth, is only known in connexion with an abortive scheme of vulgar vanity."—*Times*, July 5.

We think with the *Times* that "the common-sense view of the case would have been to set aside the will, as the product of a diseased mind." The following recitals may be placed in the same category as the act of Peter Thellusson:

"A singular lawsuit, which has been pending for several years at Ferrara, has just been amicably settled. A nobleman, named Bonacciolli died some years ago, leaving a will by which he appointed his own soul as universal heir to his estates, representing a value of 5,000,000*l*. The charitable institutions of Ferrara laid claim to the property, while the brother of the deceased attacked the will on the ground of nullity. After long judicial debates an arrangement has at length been come to, by which the brother abandons his claims in consideration of certain moneys which Cardinal Casoni, the curator of the above establishments, engages to pay to him, and to the other relations of the deceased. It appears that this result has been obtained through the interposition of the pope; in any other country the will would have been declared null and void."

We read in *Galignani* :—

"Society in Vienna has been recently startled by the following strange act accomplished on his death-bed by a Baron Silberstein. He had threatened to disinherit his son in consequence of a family dispute; and on feeling his end approaching, he carried out his threat; he converted his fortune, amounting to 170,000 florins, into bank-notes, and burnt them."

Public attention has of late been directed very much to the subject of insanity, and the care of the insane. Several cases, in which the plea of insanity was raised, and which were calculated to excite general interest, have, during the past quarter, been heard in our law courts, and several commissions of lunacy have also been held.

Foremost in interest among the commissions was that on Mrs. Turner, not so much from any intrinsic merit in the case, as from the influence it had in giving rise to a popular outcry against private asylums; foremost in importance was the commission on Mr. Ruck. The commission held to inquire into the state of mind of Sir Henry Meux, M.P., is worthy of being noted from the length of time, nine days, which it occupied, and from the fact that the jury were not able to come to a conclusion from the evidence given upon the time when Sir Henry first became of unsound mind (the point submitted to them), it being admitted that he was imbecile at the time of the inquiry.

The commission appointed to inquire whether Mrs. Turner was a lunatic or not, was held at York in July. Mrs. Turner had been sent to the Acomb House Asylum, near York, in December, 1857. At that time she was undoubtedly lunatic, the most marked symptom being a suspicion that a conspiracy had been entered into, her husband being connected with it, to "murder" her by poison. The jury, consisting of twenty individuals, after the inquiry had extended over two days, returned a verdict (seven jurymen dissenting) to the effect that Mrs. Turner was then of sound mind. The case itself presented no points of particular interest, but during the inquiry it was ascertained, upon the evidence of the proprietor of Acomb House himself, that he had at times been guilty of using grossly offensive language to Mrs. Turner, and that he had also treated her occasionally most brutally. The conduct of the proprietor was shortly after made the subject of special investigation by the commissioners, and upon their recommendation the licence of the asylum was revoked.

The unjustifiable treatment which Mrs. Turner had received at Acomb House was made the subject of severe censure by the press, and occasion was taken, at the same time, by several influential journals to make an attack upon private asylums generally; and subsequently an almost general onslaught was made by the press upon these establishments, the commission on Mr. Ruck contributing not a little to such a result.

Mr. Ruck is a gentleman whose usual residence is in Merionethshire. Seventeen years ago he had married a Welsh lady, and he had lived with her until the period when it was thought necessary to confine him in an asylum, having by her a family of six children, the youngest being at the time of the inquiry two years old. It was shown in the

evidence given before the commission that, in 1856, he had given way to intemperance at intervals, and that occasionally he manifested extraordinary restlessness, going about at all hours of the night without apparent object, and sometimes causing himself to be driven over unfrequented tracts of country in the dead of the night. In 1857 he became subject to extravagant delusions respecting the virtue of his wife; he also entertained a belief that two illegitimate children born to him by a female residing in his own house had been murdered; and several times he manifested suspicions that the food given to him was poisoned. The delusions respecting his wife's fidelity increased upon him. Often he expressed them to her in the foulest language, accusing her of the vilest and most promiscuous prostitution; and in the latter part of the year, on the advice of Dr. Conolly, he was removed to Moorcroft House Asylum. It was admitted that the delusions which led to Mr. Ruck's confinement were present at the commencement of June last, but it was contended that they had been entirely removed since that period, in consequence of the inquiries set on foot, for Mr. Ruck's satisfaction, by his solicitor. Dr. Forbes Winslow gave evidence of the existence in May of the principal delusions under which Mr. Ruck suffered, and Dr. Conolly and Dr. Sutherland gave evidence of their existence at the commencement of June. These physicians had not had an opportunity of examining Mr. Ruck since June, but from the opinion they had formed of the character of his affection when last they had examined him, and from the evidence which had been since laid before them, they thought that there was not sufficient evidence to show that the delusions were removed, although they considered Mr. Ruck to be much improved. Moreover, they did not believe that intemperance was the sole cause of his delusions. Dr. Tuke, Dr. Seymour, Mr. Lawrence, Mr. Skey, Mr. E. Canton, Dr. Copeland, Mr. John Gay, and Dr. G. Johnson, all of whom had examined Mr. Ruck since June, and since proceedings relative to the commission had been commenced, gave evidence as to his then sanity, and all, except Mr. Lawrence, expressed the opinion that the delusions had been caused by intemperance. The question of treatment was raised during the inquiry, and the majority of the medical witnesses expressed opinions coinciding with that given by Dr. Forbes Winslow to the effect that it would perhaps have been better had the case been dealt with out of an asylum; and Mr. Lawrence thought it was still requisite, as a matter of prudence, that Mr. Ruck should for a short time be kept under skilled supervision. After the proceedings had lasted five days, the jury, consisting of eighteen members, returned a verdict to the effect that Mr. Ruck was of sound mind, and capable of attending to his affairs. Six of the jury dissented from the verdict.

Perhaps the most interesting part of Mr. Ruck's case was the allegation that the delusions had been removed in consequence of the inquiries made by his solicitor. The following is Mr. Ruck's statement with regard to this :—

"Mr. Ruck, the alleged lunatic, was next called, and, in answer to questions put by the Commissioner, said, 'I have been present during the whole of this inquiry. That is my misfortune, though it has not disturbed me very much. I have heard the whole of the evidence. I was in a confused and agitated state of mind when I entertained these suspicions about my wife. I was caught up and put into this asylum at Moorcroft without having had any opportunity of investigating the circumstances. I merely wished for inquiry, and as soon as I had been satisfied that there were no grounds for my suspicions I should have abandoned them. . . . As I got well, the suspicious nearly vanished. I cannot say they were entirely removed from my mind, and I wished to ascertain if there were any grounds for them. I asked my solicitor, Mr. Wainwright, to investigate the facts. Though I was under those notions for a time, the facts have been now investigated to my satisfaction.'

"The Commissioner.—What means has your solicitor taken to investigate the facts?

"Mr. Ruck.—Ample means, I believe; and he took a very long journey to do so. He made the investigation at my request, and after he told me the result I said, 'That will do,' or something of that sort. I could not disabuse my mind before that investigation.

"The Commissioner.—That investigation having been made, you are satisfied?

"Mr. Ruck.—Perfectly satisfied. The investigation he made has satisfied me that my suspicions were purely imaginary.

"The Commissioner.—It would be satisfactory to the jury to know the facts on which you have come to that conclusion.

"Mr. Ruck.—I believe that the gentleman who travelled with us to Welshpool had not seen my wife in the previous part of the morning. That was one of my suspicions. I had also a suspicion that Mary Jones came and lay by my side at Welshpool. It turns out that Mary Jones was never at Welshpool at all at that time. Having felt those suspicions, I could not rest until I had satisfied myself that they were groundless. I was bound to investigate them. Another circumstance is that I made a mistake about the name of the gentleman who travelled with us in the mail to Welshpool. I find his name is Bailey, and not Peach, which I supposed it to be. It is possible, in the excitement under which I laboured, that I conceived many things true which were not. I can only say that I don't think anything more of them. I wished an investigation to be made at Reading when I was there, but I was prohibited from seeing any of my friends or writing to them. It was on the 14th of June last that Mr. Wainwright communicated to me the result of his investigation. I have not seen Mary Jones since I left her at my own house. The children are an unfortunate affair. I don't know where they are now. I have never seen the children I had by her.

"The Commissioner.—Do you think they are living?

"Mr. Ruck.—Well, I suppose they are. She refused to give me any information about them. She would never say whether they were alive or what she had done with them. She ought to have satisfied me about that. . . .

"The Commissioner.—Why did you not communicate to her (Mrs. Ruck) that your suspicions had been dispelled?

"Mr. Ruck.—Because I had then got notice of this commission, which I thought was a most cruel thing towards me. If she had not issued this com-

and had allowed me to institute this inquiry, everything would have ended satisfactorily. I have lived in this country all my life, and I could understand that such a thing would have been permitted as the sending me croft in the way in which I was sent there. I suspected my wife on other grounds, and now that my suspicions are removed I am satisfied. I had no foundation whatever for my suspicions that she was criminal with me. I made those charges under excitement arising from drink. I had let up to within a week of my leaving Pantlludw, and able to transact business. I went to amuse myself in shooting three or four days, and then she changed. I drove about the country to different places to amuse myself and took drink, and that accounts partly for the state in which I was

the Commissioner.—He had for some years lived unhappily with his wife, and had been in consequence very wretched. That was owing to her refusing to have any intercourse with her. He desired to be separated from her, because he understood that she did not wish to live with him.”—*Times*.

Ruck's case attracted great attention from the public, not only on account of the distinguished names of several of the medical men who gave evidence before the commission, but from the fact of the case occurring at a time when a strong feeling existed against the maintenance of private asylums; and one circumstance connected with the case—the careless mode in which a portion of the certificate concerning Mr. Ruck to the asylum had been filled up—seemed to justify the course of argument it had, almost without exception, taken upon the question. We do not propose to enter here into any discussion of or plea for private asylums; and Dr. Forbes Winslow has already commented on the unsatisfactory state of the law regarding lunatic certificates of lunacy.* We would, however, remark, that the maintenance of private asylums by the Commissioners of Lunacy is of a more effective character than that of public. For example, the removals from the cells at Acomb House led to an immediate revocation of the certificates; but we are told, in the last Report of the Commissioners, that they had had reason to complain of the foul condition and defective medical treatment of the patients, and also of one or more acts of excessiveness and cruelty, at the public asylum in Haverfordwest; yet notwithstanding the repeated remonstrances of the Commissioners at four different visits, at intervals of several months, no improvement was made in the asylum, and at length they were compelled to submit the matter to the Secretary of State. Now, the *Times* says, “We are fully prepared to acknowledge that there are private asylums conducted by persons of good character, in which every comfort and care that can be desired is afforded to persons labouring under mental disease; others there are, in which precisely the reverse of these conditions may be

Address at the Meeting of the Association of Medical Officers of Asylums for Wales, delivered at Edinburgh, July 23, 1858. See article “Lunacy Legislation,” p. 523 of the present vol.

found, and it is against establishments of that class that security is desired. Need we say that the only real security would lie in their total abolition? . . . With regard to public asylums we have nothing to observe, for there can be no doubt that it is not in institutions of that class that the great abuses occur." Had the writer referred to a few of the later Reports of the Lunacy Commissioners, he would have ascertained how essentially erroneous the last remark is; and if we were to apply his arguments to public asylums, the result would be that we ought to agitate for their abolition also! No benefit is to be obtained from this style of reasoning, and improvement is retarded by having recourse to it, the attention being diverted from the true questions at issue. The *Times* does not, however, overlook the insuperable objections to any such sweeping reform as that which it advocates; for it remarks that "it is impossible to resist the conclusion that the public will have asylums of this kind in one form or other."

It is necessary that this very natural feeling of the public should be respected; and it would be well if the press, while advocating a stricter attention to the civil rights of the insane, would also give some little thought to their social rights. The law in its present state, while aiming at a due care of the civil rights of the lunatic, ingeniously throws most formidable obstacles into the way of many individuals, suffering from incipient mental affection, receiving that care which would be given to an individual suffering from any other malady. The person who has manifested the earlier symptoms of a disordered mind is often altogether debarred from receiving proper medical attention, unless he be first certified to be and registered as a lunatic—as being, in short, that which the medical man is anxious to prevent him becoming! As a medical question this is a matter of the greatest importance, and as a social question it is equally important; for the law often renders it requisite for individuals to be registered as lunatics, to their serious social detriment, who are suffering from a temporary and readily curable disturbance of the functions of the brain (see p. 532). Until the press and the public will regard this question respecting the medical attention of persons suffering from incipient symptoms of lunacy in its proper light, we cannot hope for a comprehensive improvement of the legal and general care of lunatics, and for a diminution of the false notions which are still prevalent respecting asylums.

The following remarks from the *Daily News* are worthy of being quoted:—

"A sweeping reform in the whole system of treatment of lunatics is urgently called for. The paltry palliations suggested are utterly worthless. It is proposed to abolish private and tolerate none but public asylums. But if the so-

called public asylums are to be under the management of the same men who conduct the private asylums, what will be gained by the change? The truth is, almost every improvement that has been made in the treatment of the insane of late years has originated in private asylums. This is natural: the keeper of the private asylum depends for success upon his reputation; the keeper of a public asylum has no such stimulus to improvement. What is wanted is, that the Legislature, taking advantage of the lights of modern discovery, should clearly define the rights of individuals, and limit the physician's power of coercion. Within these limits the skill and humanity of the physician ought to be liberally trusted. But an efficient machinery should be organized to see that the law is respected, and to enforce it if need be. At present the law is vague and the machinery defective. There is no adequate security for any person alleged to be mad. There is no adequate security for the public against real madmen. The first thing to be reformed is the Commission of Lunacy; the next is the law which the Commissioners are supposed to enforce."

It is not often that a suicide occurs of so strange a character as that recorded in the following paragraph. Is the recital a fact, or an extravagant fiction?

"There is a furnished hotel in the Quartier St. Denis," says the *Droit*, "which is principally occupied by junior clerks. There is a large room in common for them, where those who happen to be without employment pass their time in playing cards or talking. The day before yesterday one of them, named Emile D—, said to his companions in a jocular way that it was so hot, and he was so out of spirits, that he had a strong inclination to blow his brains out. One of the young men present said he would make a bet against his doing such a thing. 'What will you bet?' replied Emile, still in the same laughing tone. 'A bottle of beer.' 'Done,' said the other, 'but order the beer at once, for as, to gain the wager, I must shoot myself, I should like to drink my share of it first.' The beer was ordered and drunk, when Emile rose up to leave the room. 'Where are you going?' said the others. 'To shoot myself,' was the reply, which was received with a burst of laughter from all present. Their merriment was, however, immediately put an end to by the report of a pistol in an adjoining room, and on running to the spot they found the young man lying dead on the floor. As no clue to his family could be found, the body was conveyed to the Morgue."—*Times*.

The *Saturday Review* has the following excellent remarks on this case:—

"The real stimulant to suicide is not reflection, but that absence of reflection which is engendered and fostered by society—by the constant intercourse, that is, of men and women bound together in some other way than by the ties of family life. The two greatest conquests of man, the two richest fruits of his wisdom, his experience, and his cultivation, are the virtue of women and the respect for human life. It is only by infinite pains they can be established, and it is only by infinite pains they can be preserved. For the society which profits by them in order to gain refinement and stability, threatens them with the very refinement and stability of which they are the most efficacious causes. As men get knit together, as life becomes more complex, as the surface of things is more polished, everything seems safe, and we transfer the security we feel from this world to the next. A sort of half belief steals through the mind that the scheme of divine justice has been arranged more pleasantly than it used to be, and it is hoped that God has withdrawn himself except from the casual purposes of a spasmodic mercy. Under the influence of these feelings, society begins rapidly to decompose. The

virtue of women is treated as the dream of boys, and life is valued at a pot of beer.

"The novelists of modern France have represented this phase of human action in every possible light, and if they were charged with not drawing from the life, this foolish lad and his wager would justify them. The savages of a Pacific island could scarcely make lighter of chastity and existence than the inhabitants, as painted by the novelists, of the first continental city of civilized and Christian Europe. And the two things are always connected. The heroine goes through the easy process which scarcely deserves to be called falling, because her lover is going to shoot himself, or has even gone so far as to shoot himself partially. The hero, on the other hand, cocks his pistol at every turn of the intrigue. If the lady is momentarily stern, he has a good cry, and looks to his priming; if she yields, he feels his destiny is accomplished, and begins to trifle with the trigger. Nothing but the nicest art and the extremest finish of Parisian coquetry can keep the poor creature alive till the last chapter, and then, if he kills himself, he may die like a dog, and nobody cares. So pervading are these thoughts, that French novels are apt to be constructed on a pattern monotonously the same. But truth is often stranger than fiction, and art should gather resources from every quarter. What a *coup* it would be if some writer of romance were to take a hint from this newspaper story, and introduce a love-scene of appropriate passion and violence between the pot of beer and the explosion of the pistol!

"Suicide from recklessness of life is but the last stage of a descent along which the intercourse of society is apt to hurry all who give themselves up to it. The tendency to feel safe is almost irresistible under the excitement of life in a large city, and with this sense of safety come temptations that appear scarcely possible when the feeling of responsibility is again awakened. If this poor wretch could have had ten minutes alone in a field, he would probably have gathered strength to forego his beer. The sovereign preservative against this influence of society is family life. Its sorrows and its joys alike check the fever of the soul brought on by reckless security. But unfortunately this remedy is not, and cannot be, as universal as it is powerful. There are many persons for whom family life is a practical impossibility. But they have an antidote still left, and this is solitude. They can sometimes be alone, absolutely and consciously alone. This will be the salt of their lives, and solitude will restore them to themselves. If, alas! the salt has lost its savour, where-with shall it be salted?"

In July suicides became so numerous in London that one of the weekly journals devoted a column, under the significant heading of "The Suicide Mania," to the records of such cases as had occurred during the seven days. Whether there was an excess of suicides in that month as compared with the same month in previous years, or whether there was an excess during the quarter as compared with previous quarters and the same quarter in the preceding year, cannot be told until the mortality records for the quarter are complete.

Several curious instances of suicide committed by young persons have recently occurred. A lad of twelve years of age, who had been convicted of some trifling offence and sentenced to twenty-one days' confinement in Chester Castle, hung himself in his cell. The circumstances of this case are not well known, but from the mother's statement it would seem as if there had been some unnecessary harshness in the punishment.

The following is an account of an inquest held upon the body of a boy who had committed suicide in Camberwell :—

“Yesterday (July 6th) Mr. W. Carter held an inquiry at the Kentish Drovers Tavern, Camberwell, respecting the somewhat extraordinary death of a boy, named John Thomas Cousens, aged thirteen years, who destroyed himself under the following circumstances :—

“Samuel Fry, having been sworn, said that he lived with his parents at No. 11, Sumner Street, Commercial Road, Peckham. The deceased resided next door. On Friday last he (witness) was sent by his mother on an errand, and when near the canal bank at Peckham met deceased, and he (witness) then told him that his father was looking after him, as he had run away from home. The deceased said, ‘I don’t care if I did stop away, as father said he should not take the trouble to come after me.’ On returning towards home, the deceased said to him as they were walking by the canal bank that he ‘liked being near the water,’ and shortly after making this remark he went into the water, just over his boots, and came out again; and then, after remarking that they (meaning his parents) would never see him again, rushed into the water, and, after struggling about, sank. An alarm, however, was given, and a young man named Robert Hastings having procured the drags, with assistance the body, after about sixteen minutes, was taken from the water.

“It further appeared from the evidence of Thomas Cousens, deceased’s father, and Ann Cousens, his mother, that the deceased left home on Thursday to go to work, but after he had been gone about an hour it was found that some money was missing; and, as the deceased had been guilty of stealing before, it was believed he had taken it. The deceased stayed out all night, and was never seen alive again by the parents. The father was present when the body was taken from the water. The body was conveyed to the Kentish Drovers, where every means were taken to restore suspended animation, but without effect.

“It further appeared that the deceased had before left his home, staying out all night, and had been corrected by his father on his return.

“Some other witnesses having been examined, the court was cleared of strangers, and the jury in about an hour returned the following verdict :—‘The jury consider that the deceased no doubt went into the water for the purpose of destroying his life, but there was not sufficient evidence to show in what state of mind he was at the time; and they likewise believe that he was afraid to go home for fear of correction.’

“The inquiry then terminated, having lasted some hours.”—*Standard*.

Here is another instance :—

“On Friday (September 10th), Mr. W. H. Phillips, deputy coroner, opened an inquest at the Fighting Cocks Inn, at Blakenall, near Wolverhampton, on the body of a young girl, Emma Griffiths, who committed suicide under the following distressing circumstances. William Cartwright, a blast furnace man, deposed that at about eleven o’clock on Wednesday morning he saw the deceased running along the road leading from Penn to Bilstone. Her father was about twenty yards behind. When she came near to Dainty’s garden, she turned along a by-road leading to the Cock Street engine, ran up to an old pit which is about six feet from the path and twenty yards from the turnpike-road, and got over the wooden boarding placed round the shaft. Witness was quite sure the deceased threw herself down the shaft wilfully. The scaffolding upon which she fell was sixty-nine yards deep. Joseph Elwell, engine-man, stated that he was let down by a rope into the pit. He went down three times, and dragged for her through thirty feet of foul air. At last he got air-troughs, which cleared the shaft to within nine feet of the scaffolding, and he then recovered the body. John Griffiths, father of the deceased,

said she was fifteen years and four months old, and had for about six months been living in service at William Traunter's, a beershop-keeper close by. She came home on Sunday morning, and said her master had been 'pulling her about.' Witness replied, 'Then, my wench, I'll make an example of him.' She was very much agitated, and then on Monday and Tuesday the sight of a man seemed to frighten her. Witness on Tuesday instructed her to meet him at the magistrate's clerk's office. She failed to do so, and when he went home at night he found her in bed. He asked her why she did not meet him. She said, 'Father, I was ashamed; I am very bad.' He said he should take her to a surgeon's; but on Wednesday morning, he found upon getting up that she had left home. He traced her to the Penn turnpike, and, accompanied by his little boy, about five years old, followed her slowly at a distance of about thirty or forty yards. When she got near the Fighting Cocks she ran towards a pit. Witness then shouted out to her, 'Oh, my wench, what are you going to do?' She did not, however, heed him, and rolled herself over the fencing around the pit into the shaft. He did not believe that she knew what she was about; for, on the Sunday, when Traunter came into the yard, the deceased became dreadfully agitated, and wanted to get out at the front window. The coroner inquired whether on any previous occasion the deceased had complained of ill-treatment. Witness said she had not, but when he questioned her respecting Traunter's previous conduct, she said that he had 'pulled her about before,' but he had never 'served her so bad as on Sunday morning.' The jury expressed themselves in strong terms upon the alleged conduct of Traunter. The father said he hoped this man would be punished. The coroner replied that, if all was true that had been stated, Traunter richly deserved punishment. He, however, had no power to interfere, but recommended Griffiths to consult a solicitor. The father said he was a poor man, and did not know how he could find the means to institute a prosecution. After some further evidence had been taken, the inquest was adjourned until Wednesday next, to give time for a *post-mortem* examination."—*Times*.

These three cases derive their principal interest from the age of the individuals.

Among comparatively recent suicides is recorded that of Henry William Herbert, a popular writer, better known as "Frank Forrester." He shot himself, when in company with a friend, at a lodging-house in Newark, U.S., and it is stated that domestic difficulties led to the commission of the rash act. He had been married about three months previously, but he had not lived with his wife more than six weeks when they quarrelled, and she separated from him. Herbert suffered from intense mental agony in consequence of the severe blow, and in his ravings often threatened to commit suicide. After the act had been committed, a letter, of which the following is a copy, was found in his writing-desk, addressed to the coroner:—

"Tuesday, March 18th, 1858—(Three months since the happiest day of my life)—To avoid all trouble and simplify your duty, I have to state that I have taken my own life with a pistol, no one being privy to my doing so, or to my design. My reason for this act consists in no remorse for anything that I have done or left undone—from no pecuniary pressure—from no inability or fear of inability to support myself—from no weak fear of public opinion, least of all of the public opinion of Newark, which I do now, as I have always done, utterly disregard and despise—from no embarrassment arising from any in-

tedness. I have abundance of employment, and the prospect of much more. I address the people of Newark, whom I forgive from the bottom of my heart, and offered me to live harmlessly and happily in my humble home, and to amend my life where it was in error in a new sphere, which I was honestly prepared to do, I might have paid off all my debts and lived many years among you an honest, useful, and happy man. My debts will be paid from assets to the last dollar. It was not, however, so to be. My blood and the guilt of it are upon these men and women of Newark who first sowed suspicion, distrust, and dissension between myself and the sweetest creature God ever gave and man took away from an unhappy sinner. My own unhappy temper did the rest. The reason for this act is simple. My life, long sad, and solitary, and weary, and without an object beyond labour to earn a living for the day, has become utterly hopeless, hateful, and unendurable. A hope had been kindled in my heart; my home had got a light brighter than sunshine—my life had a purpose; I loved her unutterably—happy; all this has been dashed down, all is lost for ever—home, hope, sunshine. She let life go lifewise; since henceforth it is another word for torture. I would not deny falsely one fault of which I am conscious, especially at this last moment; I would not deny that I erred towards her whom this day shows I loved more than life. I did err, but it was usefully, in rash act or rash word—never, so may God deal with me, in thought or intimation. I never had a word with her about money matters, nor cared or scarcely knew whether she had or had not money. I never laid a hand or finger on her in wrath in my life. What I did or said wrongfully, I repented at the instant. I have endeavoured to atone for it ever since. I die for it this day. I think, I hope I deserve pity more than blame; but I know that I shall not find it, least of all in Newark. I can say truly with my last breath I never wronged a man or woman in my life by premeditation, or failed to ask pardon and make atonement when I could do so. I never bore malice in my life. I repent of all my faults and sins, and have endeavoured to amend them. I die in perfect peace and charity with all men; I beg forgiveness of all those against whom I have sinned; I forgive all those who have sinned against me, even the woman who called at my own house, and set my wife's thoughts first against me—in proof of it I am sure I know her, but do not use her name; I beg God to forgive me, as I forgive all my enemies. I die in perfect faith and trust in my Redeemer, and believe that in Him I shall live eternal life.

"HENRY WILLIAM HERBERT."*

What a painful picture of capricious irritability and moroseness, verging on insanity, have we here! Does not every portion of this statement point to the existence of some obscure disease of the brain? Had the exacerbations of temper of the unfortunate man (singularly irrational as they must have been, as may be gathered from the record before us,) been looked upon as the result of an abnormal condition of the brain, it is not probable that his life might have been saved, and his domestic comfort secured, by the aid of a kind and sympathizing physician?

Whether the imprisonment of the lad who committed suicide in Hester Castle be considered an act of thoughtless severity or not, the incidents are unfortunately not wanting to show that the reformatory movement is not so well appreciated on the bench as it ought to be, and that too many of our magistrates still adhere to the vicious old dogmas of punishment. For example:—

* *New York Herald.*

"At the Rockdale Petty Sessions, on Thursday, Owen Glancey, an Irish boy, aged twelve years, was charged with robbing the garden of James Cheetham, of Forth's Lane, on Tuesday. Mr. Cheetham caught him in the garden, and on searching him found upon him eight gooseberries! It was stated that the prisoner had done a similar thing before, and the bench sentenced him to pay for one month's hard labour."—*Westminster Telegraph*, Aug. 29.

Again, in the House of Lords (June 28th):—

"Lord Brougham called the attention of the House to the case of a boy only eight years of age, who, in the absence of his parents and of any person connected with him, and in the absence, moreover, of all legal evidence, had been sentenced by some judicial tribunal in Edinburgh to be imprisoned and flogged. That sentence had actually been carried into effect, and the poor boy went forth into the world branded as one who had been flogged in the most ignominious manner. Since then the conviction had been quashed. He had received a letter from a professional gentleman, who had interested himself in the case, stating that upon an action being brought a large sum was obtained as compensation for the boy, and his friends thought that under the circumstances—the conviction being quashed—his character was sufficiently vindicated. The boy's friends might be satisfied, but he should not be satisfied, nor would justice be satisfied, without further inquiry. (Hear.) He hoped there would be no further delay in the production of the paper for which he had moved."—*Times*.

Such perversions of justice as these examples show are simply monstrous; it is a reproach to the whole of the bench in the neighbourhood where they happened that they were not repudiated:

Among the criminal events of the quarter, the horrible murder at Darley, in Yorkshire, holds—not only from the terrible character of the deed, but also from the singular psychological study it affords—the most prominent place; but as the whole circumstances of the case (notwithstanding the criminal's confession) cannot be fully entered into until after the trial of the murderer, we shall postpone any consideration of it until our next quarterly retrospect.

THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

OCTOBER 1, 1858.

ART. I.—LUNACY LEGISLATION.

BY FORBES WINSLOW, M.D., D.C.L.

Being the Valedictory Address at the Meeting of the Association of Medical Officers of Asylums for the Insane at Edinburgh. July, 1858.

BEFORE proceeding to the consideration of the special subject of my address, and resigning into the hands of my illustrious successor the distinguished office with which you honoured me when we met in 1857, at Derby, I would beg to congratulate you on our holding this year our usual annual meeting in this justly renowned and classical city.

I cannot conceal from you the great pleasure and gratification which I feel individually, and in which I am sure you all participate, in having this opportunity of meeting on their own native soil not only the members of this, but of the British Medical Association residing north of the Tweed, but of having the privilege of renewing acquaintance with the many distinguished and honoured members of our profession living in this illustrious and far-famed seat of learning.

Gentlemen, we tread on sacred and hallowed ground; we breathe an atmosphere redolent of sweet poetry and of wild, fascinating romance; we hold sweet communion and holy converse with art, literature, and science, in their most exalted types and noblest forms. A halo of genius gilds and encircles every object upon which we fix our attention; associations of the most touching and thrilling character gush upon the mind wherever we turn our steps; we are in the cradle of genius, the emporium of science, the great school of art, the Academic groves of literature and philosophy—

“Hail, Caledonia, name for ever dear,
Before whose sons we're honoured to appear;
Where every science, every noble art,

That can inform the mind or move the heart
 Is known
 Philosophy, no idle pedant's dream,
 Here holds her search, by Heaven-taught Reason's beam."

Need I say more to awaken in your minds the warmest enthusiasm, than to remind you of the fact that we are in the country rendered immortal by the resplendent genius of a Burns and a Walter Scott? How often have we confessed ourselves spell-bound by the magic wand of these great and illustrious poets! How much of our fondest hopes, our boyish affections, our yearnings after the good and the beautiful, our aspirations for worldly fame and distinction, are closely interwoven with the wonderful creations of these mighty gifted men! How the mention of their names brings back to the heart the earliest of our most pleasing, and perhaps sad and painful associations! As we thread our way through this city of enchantment, and gaze on our right and on our left, to the

*"Distant hills,
 From hidden summits fed with rills,"*

to those many sacred spots enshrined by genius, the memories of the glories of the past rush back to the heart with all the freshness of an early spring. Bidding adieu to the realms of sweet poesy and romance, and considering graver matters of contemplation, the renowned names of Robert Bruce and William Wallace suggest themselves instinctively to our minds. Great, brave, illustrious, and generous warriors, we now pay homage to your virtues and your valour, and worship at your shrine!

Turning from the contemplation of martial glory to the more unostentatious cultivators of science and philosophy, we find in the annals of their great country the names of men pre-eminently distinguished as mathematicians, natural philosophers, logicians, statesmen, geologists, metaphysicians, historians, and jurists, both among the professorships and students of the University.

I will take the liberty of referring to a few of the more distinguished men who have either held office in the University of Edinburgh, or have been educated within its walls. Among the renowned students and graduates of the University of Edinburgh connected with our own profession are the following:—Dr. John Brown, founder of the Brunonian system of medicine; Dr. George Cheyne; William Hunter, brother of the late John Hunter; Sir John Pringle; Dr. James Abercrombie; Sir Gilbert Blane; Dr. Andrew Combe; and Dr. John Reid. Among the celebrated professors, we find the names of the great Cullen, author of the "First Lines;" the two Duncans, one Professor of Mathematics, and the second of the Institutes of Medicine; Dr.

Hope, Chemistry; Sir R. N. Sibbald, Practice of Physic; the two Hamiltons, Alex. and James; Dr. Plummer; John Thompson, Professor of Military Surgery; Dr. James Gregory, Professor of the Practice of Physic; the Monros, *primus, secundus*, and *tertius*; Dr. Black, immortalized by his discoveries of latent heat; Sir Charles Bell; and Robert Liston. The latter, although not officially connected with the University, was a distinguished surgical lecturer in this city. In the list of eminent and illustrious men who were educated in this University, I find the names of Dr. Hugh Blair; James Boswell, immortalized by his "Life of Johnson;" Sir W. Scott; Professor Wilson, known to the public as Christopher North, who was Professor of Moral Philosophy; and Francis, afterwards Lord Jeffrey. Among the celebrated historians are David Hume; Henry; Robertson, made famous by his celebrated "History of America and Scotland," as well as the "Life and Times of Charles the Fifth of Spain;" and Sir Jas. Mackintosh, author of the "Political History of the Last Century." Among the metaphysicians were Reid, Drs. Thos. Brown, Dugald Stewart, and Sir W. Hamilton. In divinity, Dr. Chalmers stands prominently forward; and as a celebrated jurist the name of Erskine, the author of the "Institutes," is entitled to our profound respect. Among the eminent natural philosophers, statesmen, and others distinguished in literature, the following honoured names may be mentioned:—Adam Fergusson, Professor of Natural and Moral Philosophy, and author of the "History of the Roman Republics;" Lord Kames; Alex. Murray, Professor of Hebrew, and well known as the author of the "Philosophic History of the European Languages," and Lecturer on Oriental Literature in this city; John Playfair, Professor of Natural Philosophy and Mathematics; Hutton, the celebrated Geologist; McLaurin, the great mathematician; David Gregory, Professor of Mathematics; and Sidney Smith, Professor of Moral Philosophy. Among the distinguished statesmen who were educated at this University, are Lord Lyndhurst, Lord Campbell, Lord Palmerston, and Lord John Russell. If I were entitled to allude to illustrious living men educated in this great school of medicine and the collateral sciences, I could easily cite a number of names familiar to us as household words and of European reputation.

I do not consider that we sufficiently appreciate in England the immense influence which the Edinburgh, and in fact the whole Scotch, schools of medicine have exercised over the destinies of our profession.

Until the establishment within the last thirty years of three or four great seminaries of medical instruction in England, we were almost entirely indebted to Scotland for the medical educa-

tion of youth. Nearly all the celebrated English physicians, and many of our distinguished surgeons, undoubtedly acquired in this city and in this country the knowledge which enabled them afterwards to occupy positions of great eminence in our own country.

Let us admit with gratitude the benefit which the Scotch schools of medicine have conferred upon our noble science. Let us never forget how much of the respect in which our professional body is held in all parts of the civilized globe, is mainly owing to the flood of light which has emanated from the men whose genius has made renowned and celebrated this great school of medicine. Can we ever forget the names of the eminent medical luminaries to whom I have called your attention? The recollection of these justly-celebrated men will cluster about our memories as long as the mind retains the power of reviving mental impressions.

The great and illustrious never die. Death has no power and dominion over the genius of man: it is made of imperishable materials. The soul bids defiance to dissolution, and refuses to yield submission to the laws regulating physical decay. Can the great, the good, the intellectual, the noble, ever cease to exist? Can such—

“ . . . be left forgotten in the dust;
When Fate, relenting, lets the flowers revive,
Shall Nature's voice, to man alone unjust,
Bid him, though deemed to perish, hope to live?
Is it for this fair Virtue oft must strive
With disappointment, penury, and pain?
No! Heaven's immortal spring shall yet arrive,
And man's majestic beauty bloom again,
Bright through the eternal year of love's triumphant reign.”

It is impossible to exaggerate and over-estimate the influence which this city has exercised over the moral, political, and social progress and character of the British nation. It has always been considered as the great centre and fountain-head of modern refinement and civilization.

The men who have been educated in the University of Edinburgh, whose minds have been formed and disciplined in this school for the great battle of life, have in many instances risen to the highest positions at the bar and in the senate. It was in this city that Henry Brougham, in conjunction with Sidney Smith, Jeffrey, and Leonard Horner, conceived the idea of the *Edinburgh Review*, a journal which may be considered to have led to the establishment of our own national *Quarterly Review*, and which has always advocated liberal enlightened opinions in literature, art, science, and politics—exercising, consequently, a

great influence upon the political, social, and literary relations of our own country.

Independently of the pleasure which we all feel in having this opportunity of enjoying social communion with our medical friends residing in this country, I think we have, altogether apart from such enjoyable considerations, an additional source of congratulation at being enabled at this time to assemble in this portion of the United Kingdom.

The legislative settlement of the long-agitated question of medical reform is a significant fact in the history of modern medicine. It constitutes beyond all question one of the most important epochs within the memory of living medical men. Should not this be a subject for our mutual rejoicing and congratulation?

In the address which I had the honour of delivering in London at our annual meeting last year, I dwelt at some length on the grave responsibilities attaching to those delegated by the Legislature with the legal custody, care, and treatment of the insane.

It is not my intention now to revert to this subject.

Dismissing this topic, I propose to submit to your consideration and for your approval certain suggestions that have occurred to my mind relative to a modification of the laws regulating the care and treatment of the insane.

Mr. Tite, the member for Bath, having in a short speech during the present session of Parliament, brought under the notice of the House of Commons the existing state of Chancery lunatics, with a view to the appointment of a committee to inquire into their condition; and having, on the suggestion of Government, withdrawn his notice of motion, on the promise that in the ensuing session the whole state of the law affecting the care and treatment of the insane would be made the subject of strict Parliamentary inquiry, and, if necessary, legislative interference, I do not think I can more usefully occupy the time of the Association than by calling its attention to what I conceive to be the right basis upon which all legislation regarding the insane should rest. This will open the question for the careful consideration of the Association, and will, I hope, justify the organization of an acting, and of an *active*, committee in London, to watch the progress of future legislation on this important subject—one of all others in which we are personally and collectively deeply interested.

In all legislation relating to the insane it is most desirable that certain first principles regarding the nature of insanity should be freely and fully recognised. In the preamble to every legislative enactment referring to the care and treatment of the insane, the various phases and types of mental disease should be viewed as

the effects of certain deviations from a healthy and normal condition of the brain, the great nervous centre, curable by a well-directed course of moral, medical, and hygienic treatment.

Asylums, whether public or private, licensed or unlicensed, whether for one or more patients, ought to be considered as hospitals for the treatment of a *form of brain disorder*, only to be successfully grappled with by educated and experienced medical men.

Much of the mysticism, the superstition, the illusion, and popular fallacy, still unhappily enshrouding the subject of insanity, arises from an indisposition to liberally acknowledge this great and essential first principle.

In my former address I made some allusions to the provisions of the Lunacy Act now in operation; I called the attention of the Association to one of its clauses relating to the unjust exclusion from the office of Commissioner in Lunacy of all who were not in a position to affirm that they had within the previous two years ceased to have any interest in the confinement of persons alleged to be insane. By this clause every member of the medical profession connected with and having an interest, be it ever so infinitesimal, in any private asylum, is virtually excluded from holding office at the Board in Whitehall-place, not having undergone two years' quarantine, and not being in a position to present to the Lord Chancellor (in whose hands are vested the patronage of the office) a clean bill of health,—such being the qualification required by the English legislative enactment for the post of one of her Majesty's Commissioners in Lunacy.

This casual reference to what I had the honour of alluding in my former address brings me at once to the consideration of the constitution of the Board of Lunacy Commissioners, and opens the question, whether it is so organized as to fully meet the requirements of the Act of Parliament, and so selected as to guarantee for it the public and professional confidence? It is not my intention to criticise the proceedings of the present Board of English Commissioners in Lunacy. Like most public bodies delegated by an Act of Parliament with extraordinary power, they may not in every instance keep strictly within their legitimate boundaries. They may occasionally appear to act in an arbitrary and unjust spirit. Nevertheless, I believe they are most anxious to discharge conscientiously their important functions. Considering the extent of their jurisdiction, and the number of insane entrusted to their legal protection, it is a question whether it is not desirable either to add to the number of the existing Board of Commissioners, or to appoint in association with them a body of sub-inspectors or commissioners, with the view of carrying out a more perfect supervision of the insane, in public as well as in

private asylums. In any future legislation on the subject of Lunacy, I think it would be desirable to define with more precision the precise legal powers of the Commissioners; and in all cases of serious dispute between the proprietor of an asylum and the Commissioners of Lunacy, I consider it but an act of justice that he should, if he desired it, have the advantage of legal assistance when summoned to appear before the Board to answer any charge which the Commissioners may consider it their duty to bring against him.

Having made these few observations respecting the constitution of the Board of Commissioners, I proceed in the next place to a consideration of the provisions of the existing Act of Parliament relative to the preliminary measures required previously to the confinement of persons alleged to be of unsound mind. I refer to the medical certificates which are imperative in order to justify any kind of restraint, medical or general supervision, on the ground of insanity.

We cannot disguise from ourselves the fact that this part of the Lunacy Act is far from being in a satisfactory condition. There always has been a great outcry against the power which the law places in the hands of two qualified medical practitioners. *Prima facie* there are undoubtedly grave objections to this clause. If we always could guarantee the respectability, the intelligence, and the practical experience of the members of the medical profession called upon to certify to the mental condition of a person prior to his being placed under legal restraint, no possible objection could be raised to the law as it at present exists; but unfortunately it does occasionally happen that very incompetent men are called in to certify, and by doing so without sufficient ground or reason, serious odium is brought upon all persons associated with asylums for the treatment of the insane. The force of public opinion is beyond all doubt against this part of the legislative enactment; and we had better therefore, with a good grace, bow with submission to the *vox populi*, and consent in this particular to some modification of the law.

It is urged by those who object to the power delegated by the Act to two qualified medical practitioners, that it is not right, because the insane are no longer treated with great harshness, cruelty, and brutality, not being chained, whipped, and tortured as they were in the barbarous times long since passed away, that therefore any man should be subjected to restraint in an asylum conducted by men of unquestionable respectability, and in conformity with the most enlightened and humane principles of treatment, on the simple written testimony of two apothecaries who may never have had any previous experience in the investigation of cases of imputed insanity. I consider it to be our

bounden, our sacred duty, by some amendment of the law, to fully satisfy the public mind that every safe and proper precaution has been taken to thoroughly examine, in the minutest particular, the mental condition of every person represented to be of unsound mind, and a fit subject to be deprived for a time of his civil rights; and that the law is not in any way defective.

From what I know of the existing state of public feeling upon this point, I feel assured that it would be unwise on the part of those personally interested in the confinement of the insane to offer any opposition to an amendment of the law relative to medical certificates. It has been proposed, with a view of obviating this difficulty, and bringing the Act of Parliament more in harmony with the force of public opinion, that a quasi-judicial investigation should be instituted in every case previously to confinement. The Law Amendment Society suggested that an inquiry, similar to a commission of lunacy, should take place prior to the exercise of restraint, and advised that no person should be removed to a lunatic asylum who had not been pronounced by a competent jury to be of unsound mind, and in a condition to justify this mode of treatment. I am sure I need not occupy your valuable time in pointing out the absurdity and impracticability of this suggestion. With a view to the constitution of a less exceptional and incorruptible tribunal, it is proposed that a *Court of Commissioners of Insanity* should be formed, consisting of six or seven experienced men of high repute, who should be empowered to decide on the necessity of restraint in every case of alleged insanity. This Court is to be delegated with the authority of examining medical men upon oath, and if necessary, seeing the person presumed to be insane. Were such a preliminary course necessary in order legally to confine the insane, I very much fear it would greatly add to the statistics of chronic and incurable insanity. I think it would be most unwise, injudicious, and impolitic to throw any very stringent or vexatious impediments or obstructions in the way of confining the insane. Sensible, as all must be who practise in this department of medicine, of the enormous curative advantages which result from the immediate removal of cases of acute insanity from the associations of home to a well-organized and humanely conducted institution for the treatment of morbid conditions of mind, it behoves us to sanction no alteration in the law that would obviously and seriously interfere with this important principle of treatment. What is the alteration, it may be asked, that I would suggest to meet the difficulties referred to? The law at present requires that two qualified medical men should personally, and apart from any other practitioner, examine the patient, and

certify to the fact of insanity, specifying at the same time the facts upon which they have based their opinion.

It has been proposed, with a view to altering the law and satisfying the requirements of public opinion, that instead of two medical certificates, three, or even four, should be required in every case previously to the imposition of restraint, and that at least one or two of the certificates should bear the signatures of physicians of high character and of known repute and experience. I am bound, however, to confess, from what I know of the state of public feeling on this point, that even this great concession to the popular outcry would not be satisfactory. To meet the objections raised, and to place this matter beyond all further cavil and dispute, I would suggest the appointment of educated, respectable, and experienced practitioners, delegated with quasi-judicial and magisterial functions, to be summoned for the purpose of counter-signing the certificates of the medical men, thus sanctioning, if they thought proper, the proposed measure of confinement. These Inspectors of Lunacy, or medico-legal jurists, might be appointed to preside over certain districts in the metropolis as well as in the provinces. Being unconnected with and unknown to the relations and friends of the patient, and strictly independent of the medical men called in by the family to certify to the fact of insanity, I feel assured that the signatures of gentlemen holding such independent official appointments would relieve the public mind of all undue anxiety relative to the unjust confinement of persons alleged to be insane. I think, also, it would be considered as a boon to the medical men certifying to the fact of insanity, as well as to the family of the invalid, by placing their conduct in the matter beyond all doubt and suspicion.

There are one or two other points in connexion with the medical certificates to which I would beg to call the attention of the Association. Having dwelt upon the importance of adopting efficient measures of protecting the alleged lunatic from unjust confinement and detention in an asylum, I would suggest that in some cases of mental disorder, and mental disorder of such a kind and degree as to justify residence in an asylum or private house, the certificates of insanity should, under specific and peculiar circumstances, be altogether dispensed with.

In the existing state of the law, no person alleged to be of unsound mind can be placed under medical, moral, or general supervision in an asylum, or in a private house or lodgings (the party keeping such house or lodgings receiving payment for the board or maintenance of such patient); without two certificates of insanity. The Act of Parliament makes it also imperative on the part of the person admitting such patient into his private dwelling,

to make an official return to the Commissioners in Lunacy of the fact, accompanying such representation with a copy of the certificate and order upon which he was admitted.

In common with many medical men engaged in the treatment of the insane, I viewed this provision of the Lunacy Act as an obvious and important improvement upon the previously existing statute. I consider, however, it now to be my duty to state that I have seen good reasons for modifying my opinion of this section of the Act of Parliament. I think the law with regard to the confinement of persons in private lodgings and in unlicensed houses is too stringent in its operation.

There is a vast amount of incipient insanity and morbid conditions of mind connected with obscure brain disease, that require, with a view to the adoption of efficient medical curative treatment, to be removed temporarily from irritation and excitement, often necessarily incidental to a continuance among relations and friends. In many of these cases no progress towards recovery can be made until the patient is removed from home, and ceases for a time to be a free agent. Under kind and skilful treatment these patients rapidly recover; but in order to effect so desirable a consummation it is essential that they should be placed among strangers and under judicious control. Is it not unwise, I would ask, that the law should make it imperative that this class of mental invalids should be formally certified to be insane, and registered as such at the office of the Commissioners in Lunacy? The fact of a patient being placed under temporary restraint whilst suffering from an attack of transient mental aberration, does not at all affect his social position should he recover and return home to his family, but the position of this patient would be materially altered if he had been certified to have been insane, and visited as such by the gentlemen appointed by the Act of Parliament to examine all persons legally confined as lunatics. I am quite satisfied that there are many patients who are kept at home under great disadvantages, as far as the question of recovery is concerned, in consequence of this stringent provision of the law, and not fully availing of proper treatment.

So great is the horror which some sensitive persons exhibit at the bare mention of a certificate of lunacy, that they have confessed a determination, rather than submit to what they conceive to be a seriously damaging stigma, to abandon all idea of bringing those near and dear to them within the range of remedial measures.

Could not some modification of the law be suggested to meet this class of case? Would not the public be sufficiently protected from the interference of their friends and relations, if every person admitting such uncertified cases into his house or lodg-

ings were compelled to make a return of the fact to the proper authorities, viz.: the Commissioners in Lunacy, or the district medical inspector, medical jurist, officer of health, or by what other name it may be thought proper to designate these official personages?

There are numerous cases that require, for their own safety as well as the security and happiness of others, to be sent from home in consequence of some apparently trifling mental infirmity. It is often essentially requisite that such persons should be placed under the control and supervision of strangers. In this type of case no kind of justification can be urged for having them certified as lunatics. Again, I would suggest an alteration in the certificates required for the admission of private patients into licensed establishments for the treatment of the insane. It has often occurred to me, and I have no doubt to all officially associated with private asylums for patients conscious of their mental disorder, fully recognising the loss of self-control, bitterly bewailing being the prey to morbid impulses, to express a wish to be placed under restraint. I have known patients to drive up to the door of the asylum and beg to be received within its walls, being painfully and acutely conscious of the necessity of close supervision. Great have been the lamentations when they have been informed that they could not be admitted even for one night into the asylum, without being certified by two medical men to be in an insane state of mind. I have known such persons take the printed form of admission, and go themselves to medical men in the neighbourhood, and beg them to sign the legal certificates of insanity. Why should there not be some alteration of the legislative enactment to remedy this defect? If a person recognising his morbid condition of mind, and anxious to subject his case to medical treatment, voluntarily offers to surrender his free agency into the hands of the medical head of a lunatic asylum, the law should not force him against his will to be formally certified and registered as a lunatic. In such cases I would compel the patient to sign, in the presence of a justice of the peace or magistrate, a paper, to the effect that he, in consequence of mental indisposition, freely, voluntarily, and without compulsion, places himself in a licensed asylum for the treatment of the insane. A copy of this document, with all the particulars of the case, should be transmitted to the Commissioners of Lunacy within a few hours of admission.

If it were thought desirable for the protection of the public that these patients should go to the Commissioners themselves, and obtain their authority for entering the asylum as patients uncertified to be insane, no possible objection can be made to this course of procedure. In all legislation on the subject of lunacy,

it is most important to studiously avoid throwing any vexatious impediments in the way of bringing the insane as speedily as possible within the reach of curative agents.

A full and liberal recognition of this great principle of treatment is quite consistent with the adoption of very stringent means for the protection of the public against all unjust interference and confinement on the ground of insanity.

It was my intention, before concluding this address, to have called the attention of the Association to some other suggestions that have occurred to my mind relative to the state of the lunacy laws, not restricting my remarks to the Act of Parliament which takes special cognizance of the insane subject to restraint in licensed and unlicensed houses. I was anxious to make some remarks respecting the defective state of the law bearing upon cases of alleged mental unsoundness and incapacity which so often come before our courts of law in the form of commissions of lunacy.

I am of opinion that the law relating to these cases requires careful revision.

At present, no condition of mental incapacity is recognised by the jurists of this country apart from actual unsoundness of mind in its legal signification; and such a condition of the intellect must be established by evidence before the Court of Chancery will appoint a guardian or a committee to administer to and protect the property of the person alleged to be of unsound mind, and thereby, incapable of managing his own affairs.

The writ *de lunatico* directed by the Court of Chancery to the Masters in Lunacy, authorises these judicial functionaries to inquire into the *insanity*, *idiocy*, or *lunacy* of A or B; and no type of case can be legally dealt with by the Master which is not embraced within one of these three divisions. It is true that the modified and less offensive phrase, "unsoundness of mind" (which never yet has been satisfactorily defined by lawyers or physicians) is adopted during the proceedings preliminary to the issuing of the writ *de lunatico*, and at the time of the judicial inquiry; but if the party be declared to be of "unsound mind," either by the Master or by the jury, he is in all the subsequent proceedings designated as a "chancery lunatic," and in the eye of the law he is so considered, should he not recover, until the day of his death!

But may not a person be quite incompetent to take care of himself and manage his property, without being either insane or a lunatic? and would it not be a gross, unjustifiable, and cruel misapplication and perversion of language, so to consider and designate those who, either from cerebral disease, an accidental cause, or premature decay of intellect, are reduced to this sad condition of physical and mental helplessness? There is a vast

body of persons in this state of infirm and enfeebled mind who are entitled to and who should have extended towards them legal protection.

Men in this state of quasi-insanity contract foolish and improvident marriages; are facile in the hands of designing domestics and unprincipled knaves; they are persuaded to squander recklessly their property; large sums are often exacted from them; they are induced to make testamentary dispositions adverse to the claims of relationship and the ties of consanguinity; and in conformity with the wishes and interests of those who have obtained improper and undue influence over the poor broken-down and impaired intellect. To meet the exigencies of this numerous class of cases, there should be some short, summary, inexpensive mode of legal procedure, quite distinct in its character from ordinary commissions of lunacy. Persons so enfeebled in mind as to be palpably unfit for the management of their property, might be placed under the guardianship or tutorship of one or two members of the family, by some simple judicial process, without rendering it necessary that they should be formally declared to be of unsound mind by the judge, and registered in the records of the Court of Chancery as lunatics. To protect the property and persons of these unhappy individuals by the most stringent means that can be devised and conducted, but save them and their families from the social disadvantages that would result from their being declared to be insane. I am satisfied that an alteration in the law similar to that I have suggested is imperatively demanded, and would, if carried into effect, be productive of a vast amount of good to the community. I fear, gentlemen, I have exhausted your patience. I had much more to say to you on this important subject, but at present I shall not further trespass upon your valuable time. Thanking you most sincerely for the confidence which you have so generously extended towards me during my period of office, I now resign my post into the hands of one much more competent to discharge its duties than the humble individual who now has the honour of addressing you.

ART. II.—ON THE MORAL PATHOLOGY OF LONDON.

THE emotion which Dante underwent when, in a vision, he was suddenly removed from earth and placed within the confines of hell, was not unlike that which would be experienced by one who, for the first time, was transported from a main thoroughfare of London into the midst of one of those dense masses of building in which the nether class of the metropolitan population mainly dwells; and in which utter poverty, squalid wretchedness, and flagrant villany have their home.

As the boundaries of the metropolis have extended, certain results have come to pass, which are in some respects similar to those which may be traced as having happened during the growth of several of the great cities of India. In them, as successive dynasties have widened the area of a city, the older portions have been deserted and suffered to fall into ruin, and ultimately they have become the haunt of the jackal and the hooded snake; and while London has been growing vaster and vaster, and its streets have been spreading out still more widely, the wealthier classes of the metropolis have gradually deserted the older and closer portions of the city. These, forgotten altogether by the many, have fallen through various stages of degradation, and in the end the dilapidated, and even ruinous buildings have become the sad homes of those who, from poverty or from vice, have wished to hide themselves from the common eye, and who have found a secure retreat in the midst of the brick-and-mortar jungles of the metropolis.

Narrow and little-known streets traverse these districts, and their cores are pierced with courts which reek with filth, and which are contracted and irregular as if they had been painfully gnawn out of the huge blocks of brickwork. The houses are foul and dilapidated without, but they are fouler and more ruinous within. The walls are stained with damp, and the floors are rickety. The wood-work is black with age and filth, and it swarms with vermin. The ceilings are broken and discoloured. The windows are shattered, and paper and rags take the place of glass. Every room in these houses shelters a separate family, and every house is tainted throughout with foul odours, which steam from the open doorway and raised windows into the courtyards and streets. The door-steps are littered with children whose contracted and impish features parody a maturer age; and men and women, whose faces are graced deeply with those lines which tell of that terrible fight for a livelihood in which, as one

of their own class said, "They don't find a living, it's only another way of starving," or whose aspect is that of bold, open, and perhaps full-fed villany, lounge upon the pathway.

Cradled in such scenes a child is not merely familiarized, it is naturalized, with wretchedness, filth, and vice. It receives little parental care, for the parents are too commonly engaged in those fierce, never-faltering efforts by which alone they can scrape together the barest means of subsistence. The mother may not, if she would, give much attention to her offspring, and too often, what is the incessant occupation of the mind in that toil by which the food necessary to sustain human life has to be obtained, and the perverted and deadened feelings which arise from the continued struggle with want, blunt the mother's affection towards her child, and it receives from her only those cares which arise from a savage necessity. Coarsely, often insufficiently, and usually irregularly fed, the little being learns at the very threshold of life to endure with more or less patience the cravings of hunger; its intellect is first stirred into action in seeking the means to satisfy its most urgent physical wants; and often it exhibits a painful precocity in those matters which are needful to procure a mere subsistence:—

"I go about the streets with water-creases," said a little girl, who, "although only eight years of age," writes Mr. Mayhew, "has entirely lost all childish ways, and was indeed in thoughts and manner a woman. There was something cruelly pathetic in hearing this infant, so young that her features had scarcely formed themselves, talking of the bitterest struggles of life with the calm earnestness of one who had endured them all. I did not know how to talk to her."—"I go about the streets with water-creases, trying four bunches a penny, water-creases," said this girl. "I am just eight years old; that's all; and I've a big sister and a brother, and a sister younger than I am. On and off, I've been very near a twelvemonths in the streets. Before that I had to take care of a baby for my aunt. No, it wasn't heavy—it was only two months old; but I minded it for such a time till it came to walk. It was a very nice little baby, not a very pretty one, but if I touched it under the chin it would laugh. Before I had the baby, I used to help mother, who was in the fur trade, and if there was any slits in the fur I'd sew them up. My mother learned me to needlework and to knit when I was about five. . . . I have to be 'down' at Farringdon-market between four and five, or else I can't get any creases, because every one almost—especially the Irish—is selling them; and they're picked up so quick. . . . When we've bought a lot, we sit down on a door-step and ties up the bunches. We never goes home to breakfast till we've sold out; but if it's very late, then I buys a pen-north of pudden, which is very nice with gravy. I don't know hardly one of the people as goes to Farringdon, to talk to; they never speaks to me, so I don't speak to them. We children never play down there, cos we're thinking of our living. . . . It's very cold before winter comes on reg'lar—specially getting up of a morning. I gets up in the dark by the light of the lamp in the court. When the snow is on the ground, there's no creases. I bears the cold—you must; so puts my hands under my shawl, though it hurts 'em to take hold of the creases, especially when we takes 'em to the pump to wash 'em. No; I never see any children crying—it's no use. . . . I don't have no dinner. Mother gives me

two slices of bread and butter and a cup of tea for breakfast, and then I go till tea, and has the same. We has meat of a Sunday, and, of course, I should like to have it every day. Mother has just the same to eat as we has, but she takes more tea—three cups sometimes. . . . I am a capital hand at bargaining—but only at buying water-cresses. They can't take me in. If the woman tries to give me a small handful of cresses, I says, I ain't a goin' to have that for a ha'porth, and I go to the next basket, and so on all round. I know the quantities very well. For a penny I ought to have a full market-hand, or as much as I could carry in my arms at one time without spilling. For three-pence I has a lap full, enough to earn about a shilling; and for sixpence I gets as many as crams my basket. I can't read or write, but I knows how many pennies goes to a shilling, why, twelve, of course, but I don't know how many ha'pence there is, though there's two to a penny. When I have bought three-pen-worth of cresses, I ties 'em up into as many little bundles as I can. They must look biggish, or the people wont buy them; some puffs them out as much as they'll go. All my money I earns I puts in a club, and draws it out to buy clothes with. It's better than spendin' it in sweet stuffs for them as has a living to earn. Besides, it's like a child to care for sugar-sticks, and not like one who's got a living and vittals to earn. I ain't a child, and I sha'n't be a woman till I'm twenty, but I'm past eight, I am. I don't know nothing about what I earns during the year, I only knows how many pennies goes to a shilling, and two ha'pence goes to a penny, and four farthings goes to a penny. I knows, too, how many farthings goes to tuppence—eight. That's as much as I wants to know for the markets." "

The first smatterings of a child are commonly in a language which is very peculiar. It teems with words which are in use among the nether class alone. Remnants of the gipsy tongue may perhaps form a part of this language, but in the main it consists of words which, seemingly, have been originally invented, with strange ingenuity, for the readier concealment of the peculiar habits of the different segments of the nether class, and it is thoroughly fitted for that purpose, and also to express the most depraved passions of man. With this language the child is familiarized the moment he begins to frequent the streets, if not from the cradle; and long before the meaning of the words uttered can be fully comprehended, a child will become practised in the use of the most repulsive phrases of the nether tongue. The shrill outcries and the foul expressions which may be heard bandied about among the children of the nether class are used as common forms of speech, of the actual signification of which the child is generally ignorant.

The crowded room which forms the child's home, and in which the whole family herd together night and day, and the whole of the domestic arrangements have to be carried out, gives rise to habits which are destructive of all the ordinary feelings of modesty and decency; and in the streets the sensual passions are early aroused to full swing by the constant association of the two sexes. The passer-by may witness, in the by-paths and close alleys,

* "London Labour and London Poor," by Henry Mayhew, vol. i, pp. 151-2.

among the children which tumble about and roll upon the pathway (in their degradation not unlike the wild dogs which are found in the streets of a Turkish town), the first stages of that excessive sensual depravity which characterizes the maturer years of the nether class. Moreover, the wild, untrained life in which these children grow during their earlier years, unfits them almost ever after for the steady and persistent labour of a handicraftsman. It is certain that they will have to struggle sternly for their bread, and that, too, from early morn till night, day by day, but they will have recourse solely to such labour as will give them the freedom of moving about as they list, and which will keep them in the open air, and near the constant turmoil and excessive excitement of a large town.

So soon as the child becomes strong enough to aid in getting its own living, it is at once set to work in one of those occupations which alone are open to it. It is taught the necessity of perfect honesty to its own class, and those sleights of dealing by which the profits of the occupation it is learning may be increased. Already grounded in the language and actions of vice, the child enters into more intimate association with those who have already matriculated in the cares, the vices, and the pleasures of the streets, and listening with greediness to the vicious achievements of older children, it seeks to emulate their actions. The lad of eight years of age may be seen copying the measured bestiality of his elders, gambling with the few halfpence he may chance to have picked up, and aping the man at the bar of the dram-shop; while the childish girl will often shock the ears and offend the eyes by her filthy language and still filthier actions. Nay, the teens of years will barely have been reached, before both boys and girls will have become fully trained in everything that is vile and vicious.

The full-grown lad is characterized usually by great quickness in whatever relates to his peculiar mode of life. He rarely misses the opportunity of "earning a penny;" and he is thoroughly initiated in all the wiles of his irregular existence. Of virtue he knows nothing; the burglar and highwayman are his chief heroes, and he looks upon the successful thief with admiration. He has but a vague notion of the wrongfulness of thieving; his idea of a thief, indeed, is somewhat similar to that entertained by the ordinary run of people about a soldier. Many admire and envy the successful soldier, but comparatively few will undergo the danger necessary to acquire the envied distinction; and the lad of the nether class envies the boldness of the thief, but he does not care to undergo the peril of thieving; but he hates the police with a perfect hatred, and he regards the law either as a necessary evil to which his class is exposed, or as an engine put in force

for the special benefit of the higher classes. He is singularly ignorant of most things beyond the requirements of a street-life, and this ignorance often contrasts strongly with the sharpness and cunning which he displays in procuring his livelihood.

"Yea," said a street-lad, of thirteen or fourteen years of age, to Mr. Mayhew, "he had heer'd of God who made the world. Couldn't exactly recollect when he'd heer'd on him, but he had, most sarten-ly. Didn't know when the world was made, or how anybody could do it. It must have taken a long time. It was afore his time, or 'yourn either, sir.' Knew there was a book called the Bible; didn't know what it was about; didn't mind to know; knew of such a book to a sartinty, because a young 'oman took one to pop [paw] for an old 'oman who was on the spree—a bran new 'an—but the cove wouldn't have it, and the old 'oman said he might be d——d. Never heer'd tell on the deluge; of the world having been drowned; it couldn't, for there wasn't water enough to do it. He weren't agoing to fret hisself for such things as that. Didn't know what happened to people after death, only that they was buried. Had seen a dead body laid out; was a little afeard at first; poor Dick looked so different, and when you touched his face, he was so cold! oh, so cold! Had heer'd on another world; wouldn't mind if he was there hisself, if he could do better, for things was often queer here. Had heer'd on it from a tailor—such a clever cove, a stunner—as went to 'Stralia [Australia], and heer'd him say he was going into another world. Had never heer'd of France, but had heer'd of Frenchmen; there wasn't half a quarter so many of 'em as of 'Italians, with their earrings like flash gals. Didn't dislike foreigners, for he never saw none. What was they? Had heer'd of Ireland. Didn't know where it was, but it couldn't be very far, or such lots wouldn't come from there to London. Should say they walked it—ay, every bit of the way, for he'd seen them come 'in all covered with dust. Had heer'd of people going to sea, and had seen the ships in the river, but didn't know nothing about it, for he was very seldom that way. The sun was made of fire, or it wouldn't make you feel so warm. The stars was fire, too, or they wouldn't shine. They didn't make it warm, they was too small. Didn't know any use they was of. Didn't know how far they was off; a jolly lot higher than the gas-lights some on 'em was. Was never in 'r church; had heer'd they worshipped God there; didn't know how it was done; had heer'd singing and playing inside when he'd passed; never was there, for he hadn't no togs to go in, and wouldn't be let in among such swells as he had seen coming out. Was a ignorant chap, for he'd never been to school, but was up to many a move, and didn't do bad. Mother said he would make his fortune yet. Had heer'd of the Duke of Wellington; he was old Noney; didn't think he ever seed him, but had seed his statty. Hadn't heer'd of the battle of Waterloo, nor who it was atween; once lived in Webber-row, Waterloo-road. Thought he had heer'd speak of Buonaparte; didn't know what he was; thought he had heer'd of Shakespeare, but didn't know whether he was alive or dead, and didn't care. A man with something like that name kept a dolly, and did stunning; but he was such a hard cove that if he was dead it wouldn't matter. Had seen the Queen, but didn't recollect her name just at that minute; oh! yes, Victoria and Albert. Had no notion what the Queen had to do. Should think she hadn't such power (he had first to ask me what 'power' was) as the Lord Mayor, or as Mr. Norton as was the Lambeth Beak; and perhaps is still. Was never once before a beak, and didn't want to. Hated the crushers [police]; what business had they to interfere with him if he was only resting his basket in a street? Had been once to the Wick [Victoria Theatre], and once to the Bower: liked tumbling better; he meant to have a little pleasure when the peas came in."*

* "London Labour and London Poor," vol. i. p. 474.

The licentiousness and depravity of both boys and girls of the nether class are astounding. It is not uncommon for a lad of fourteen years of age, if he has succeeded in obtaining a livelihood, to form a companionship with a girl, and both leaving home they will live together as man and wife. No bond but sensual fancy binds the couple together, and friendly exchanges of "partners" are not unknown between lads. Notwithstanding this laxity of affection, however, the lads are usually fiercely jealous, and they will often treat their girls with great brutality, on the slightest provocation; on the other hand, the girls will freely prostitute themselves, in order to gratify a want of the boy with whom they are united. Many girls have lost their chastity long before they know the signification of the term; and by the nether class marriage is regarded with the utmost indifference, and it is commonly looked upon as a most unnecessary rite. One of the principal results of the close packing of families, male and female, in one room, and of the low lodging-houses where men and women herd together in the same apartment, is to pervert or destroy all notions of modesty and virtue, and to degrade the passions of both children and up-grown persons to the level of those of the dog. The horrible scenes of immorality enacted in the low lodging-houses, which are the great resort of lads living in companionship with girls, of vagrants, and of thieves, are indescribable. The surveillance of the police and the requirements of the law are doing much, however, to restrain the vice of these houses within less rampant bounds.

Personal indifference to pain is a common matter of boast among the boys, and they manifest little sympathy for the sufferings of others. Both boys and girls are loud in anger, and the latter admire pugilism, but they are not much addicted to fighting among themselves. The boys delight in dog-fighting and rat-catching, but their chief amusements are gambling (which is usually an extravagant passion with them, and one very early developed) and the cheap theatres. A certain degree of vanity in dress is occasionally manifested, and will at times incite a lad to unusual exertions to gratify his taste; and not unfrequently, if the pocket will permit, and the boy's gains have not been swallowed up by gambling, the palate will be indulged to excess in sweetmeats and rich food, and perhaps also in spirituous liquors.

The same traits that characterize the boy and girl, stamp also the full-grown man and woman: vagrant in habits—ignorant of all beyond the readiest modes of obtaining a livelihood—haters of the law—admirers of successful crime—knowing little or nothing, or indifferent to morality and virtue—sensual even to the terrible climax of incest—eminently brutal—utterly improvi-

dent, indeed, ignorant of the value of saving, when there may be an opportunity of laying money by—at one time pandering to the appetite by spirits and food, at another bearing semi-starvation with singular stolidity—and not only ignorant of the higher duties of life, but wanting the preliminary knowledge by means of which those duties may be comprehended.

"Visiting a sick man," writes Mr. Vanderkiste, "with one new missionary, I requested him to read and instruct him, which he did, detailing to him our fallen condition, our need of salvation, and the redemption purchased for us, in a very correct manner, and then reading a portion of a chapter in the Gospels in proof of what he had said. The poor man listened with every appearance of attention, and when my young friend said, 'You know Mr. —,' or any other interrogatives, he replied, 'Certainly, sir,' or, 'In course, sir.' My companion appeared pleased with the man's attention to instruction, and I thought it time to undeceive him. 'Mr. —,' said I, 'my friend has been taking much pains to instruct you, and now I will ask you a few questions. Do you know who Jesus Christ was?' 'Well, no,' said he, after a pause, 'I should say that's werry hard to tell.' 'Do you know whether he was St. John's brother?' 'No, that I don't.' 'Can you tell me who the Trinity are?' 'No, sir.' 'Are you a sinner?' 'Oh, certainly, sir, we are all sinners.' A pause. 'Have you ever done wrong?' 'Why, no, I don't consider as ever I have.' 'Did you ever commit sin?' 'Why, no, I don't know as ever I did.' 'But do you think you're a sinner?' 'Oh, certainly, sir, we're all sinners.' 'What is a sinner?' 'Well, I'm *blest* if I know rightly; I never had no head-piece.'"

Dark ignorance, and an entire absence of moral feeling, are the grand characteristics of the nether class; and they are the natural results of the circumstances under which that class exists. The foul and fetid dwellings, the herding together of families as if they were wild beasts, and the entire swallowing up of the mind in the struggle for daily bread, are main steps in the sad genesis of that degradation, both physical and mental, which is witnessed among this ill-starred people. It is difficult, perhaps impossible, to estimate the number of the nether class of the metropolitan population: but it forms a mass which exerts a too manifest influence upon the social condition of the metropolis. Having no fixed political knowledge, but hating blindly all that is placed above it by comfort or wealth; ignorant of the meaning and end of the law, and detesting its officers; and living in habits and indulging ideas of life which are altogether subversive of social stability, this class forms an unstable mass, which is ever ripe for the worst form of demagogue to work upon: and still worse, the ordinary habits of the individuals who form the nether class are separated in so slight a degree from that of actual crime, that every change in the condition of the class (whether it be for the better, and thus furnish the means for gratifying the inor-

* "Notes and Narratives of a Six Years' Mission, principally among the Dens of London. By R. W. Vanderkiste, late London City Missionary." Third Edition, p. 37.

ordinate desire for sensual pleasures, or for the worse, and causes suffering and want) is apt to destroy, in many instances, the slight barrier that separates the common feelings and practices of the class from overt criminality; and thus the nether class becomes a source from which is constantly flowing a greater or less stream of crime.

In "good times" the goodness is measured by the amount of gain which may be devoted to the dram-shop, to gambling, and to profligacy, and both men and women every moment float into crime on our modern Phlegethon, the river of "strong drink" (for once in the deep stream, one may not hope to escape from the current scathless, banked in as it is by profligacy and ruin), while the fierce excitement of gambling continually pricks the loser beyond the pale of the law; and in "bad times" the feeling grows apace which was aptly expressed by a ticket-of-leave man in 1857: "I don't see why I should starve; and I'm not going to do it." Action is only wanted to convert such a thought into open crime.

Again, the brutality of a father, the harshness of a mother, the sufferings of a week's hunger, the unsettledness of a vagrant life, the temptations arising from a false code of morality, the passion for sensual and other pleasures, all pave a broad and easy pathway, along which the children of the nether class troop to crime, and, if need be, a guide and tempter is never wanting in the practised criminal, who is always at hand.

It may be wondered how, with so unstable a class of the population living in our midst, suffering so much, and yet so little bound by the laws of morality, we should be for one moment safe in our houses, and that crime and villainy should not be more rampant than they are. But there is never wanting among the nether class a vague but salutary notion—one which the individuals of the class would themselves find difficult to define, and which, indeed, has more the character of a superstition than anything else—of the supreme power of the law, and of the higher classes of society; and crime is almost always regarded as a final and irremediable step. Moreover, a slight moral influence—"a little glooming light, much like a shade"—(which is not to be lost sight of in estimating the restraining powers at work among the nether class) is brought to bear upon the class by the intermixture with it of many who have had the advantage of a moral training, and who from misfortune have had to seek a home in the sinks of the metropolis, but whose moral faculties have not been obliterated.

The nether class of the metropolitan population is not recruited within itself alone. It receives constant accessions from those who, being reduced to extreme poverty, are compelled to seek a refuge in the worst haunts of the metropolis, and to pick up a

living in the streets; it is the abyss into which fall those ill-fated children who flee from their homes on account of cruel usage, who are outcast from desertion or from being orphans, or who, from a perverted love of a *quasi*-idle and wandering life, prefer the wild and irregular mode of existence of a street lad. The nether class is also the great receptacle into which fall those who, degraded by flagrant vice, sink step by step from a higher grade of society, until they at length plunge into this deep slough of humanity. Those who have been driven by poverty and want into the haunts of the nether class, have among them many who have not wanted a greater or less degree of education and moral tuition, and who, notwithstanding the deadening effects of their impoverished state, still retain much of their better nature, and by their moral influence exert some slight check upon their neighbours; but those who have been degraded by their ill-regulated passions, commonly outgo, in the foulness of their vice, that with which they are brought into contact. They exercise their more fully-developed mental faculties to give a higher finish to villany; they study to give language its highest power for the suggestion and fulfilment of immorality; they become the architects of devilism; they, in fact, show but too fully that the most thorough villain is the best-educated villain.

But there is a section of the nether class—the street Irish—which, although found in the same haunts, and exposed to the same struggles for existence, and to the same temptations and vice, differs greatly in the character of its morality from the ordinary members of the class. In the heart of London, the emigrant Irish preserve almost intact the peculiar traits which distinguish them in their own country. They retain in a great measure their prejudices against the English, their warm attachment to their own family, their habits of herding together and of feeding on the coarsest food, their excitable passions (which often lead them to break the law), and their ready wit and tongue. They also maintain, in a great measure, their aversion to steady and protracted labour, and without shame, or with indifference, have recourse to beggary or the workhouse. The majority of the street Irish are Roman Catholics, and they keep their hold of Romanism and that blind faith in the priest which is only found—at least, in this country—among the most ignorant professors of that religion. But the chief moral characteristic of the street Irish, as compared with the remainder of the nether class, is their freedom from wantonness. The females retain their virtue in the deepest sinks of vice; and the testimony is general, that when the Irish females do fall into immoral courses, it is from the unfavourable influences to which they are exposed by constant association with vice.

The promiscuous herding together of males and females in the same apartment at night, and the intimate association of the young of both sexes, are not necessary causes of immorality. It is only when these causes co-exist with loose or imperfect notions of morality, that we find the sad results which are too commonly witnessed among the nether class of the English in large towns. Among the Romanist Irish, a stern notion of morality is invariably found, partly traditional, mainly, perhaps, a result of religious teaching; for it matters not how destitute and impoverished an Irish Romanist may be, it is rare for him to be beyond the influence of religious teaching, and the doctrines of morality, which are taught side by side with his religious duties, are also practised with as great regularity. Moreover, the Irishman, even in England, is not often exempt from the supervision of the priest, who has an individual influence over his flock of vast power in teaching and restraining.

A criminal section of the nether class is one of the necessary results of the physical and moral circumstances under which the class exists. But the nucleus of the criminal section is not formed of individuals who have had recourse to crime incidentally, or who have been driven to crime by necessity, but mainly of persons who are of criminal parentage, and who have been specifically trained to crime, and to whom crime is simply the business of life. Hereditary crime cannot, however, often boast of such long descent that its origin may not be readily traced. The course of the law usually cuts short the development of family crime, before it has attained to the growth of a third or fourth generation. The common criminal possesses in excess all the evil qualities of the class from which he is an offshoot; and the low cunning which he shows in his pursuits is no greater in degree, although it may be much more striking in appearance, than that which is displayed by the nether class in more honest endeavour to obtain a livelihood. The ill-concealed feeling of admiration which is entertained by a large portion of the nether class for individuals who have dared to break the laws; the excitement consequent upon the act of crime itself; the apparently easy mode in which, by pursuing criminal courses, money may be obtained, comparative idleness indulged in, and a passion for gambling or other pleasures gratified, have a peculiar fascination for many young criminals. "Lord, how I do love thieving," exclaimed a young thief in Colonel Chesterton's hearing, "if I had thousands, I'd still be a thief."

By the thoroughly trained thief the law is regarded much in the same way as ordinary individuals regard sickness. The evil

1. *Revelations of Prison Life, with an Inquiry into Prison Discipline and Secondary Punishments*, by Geo. Laval Chesterton. 1856. Vol. i, p. 165.

is a necessary one, and it is to be avoided, if practicable; but should a casualty befall it must serve as a lesson by which in future mischief may be more readily shunned. An efficient police has done much to diminish the halo which hangs about crime and the criminal in the haunts of the nether class, but still the false lustre lingers and serves as a stimulant to the juvenile criminal.

Although the nether class of the London population has its peculiar haunts, and its depravity and licentiousness are, in a great measure, kept within itself and hid from the common eye, except in so far as they are made known by overt crime, or, perhaps, by a popular commotion, it would be a serious error to suppose that the social influence of this class does not extend beyond its capacity to nurture crime and to furnish a portion of the material by which popular tumults may be carried out. The nether class has more or less intimate bonds with the operative class on the one hand, and with the commercial class, through various kinds of tradesmen, on the other, and a baneful effect is produced upon the morality of both classes by the influence of the nether class. Moreover, the baneful effect of this influence is probably felt in every grade of society, however remote it may be in appearance from the exercise of such an influence. Certainly in the metropolis the nether class is more separated from the moral restraints of other classes than in smaller towns, and in this greater degree of separation consists one of the principal characteristics of the metropolis. In small towns the worst districts of the town are usually well open to the eye of the classes having a higher social grade than the nether class, and an indirect moral influence is brought to bear upon that class which is not without benefit. Moreover, in small towns the worst districts are easier of access to ministers of the Gospel. In the metropolis, however, where wide areas are inhabited by the nether class alone, and where these districts are almost unknown but to this class and to the policeman, an indirect moral influence of the kind mentioned is but slightly felt; but, on the other hand, it is probable that the greater amount of intense vice (not greater intensity of vice, for the difference is most probably in quantity, not quality) in these districts acts much more sensibly upon the classes thrown into contact with the nether class than elsewhere.

The operative class is thrown into intimate connexion, both in business and in pleasure (particularly in those places of common resort, the dram-shop and beer-house) with that portion of the nether class which is known as the "street-folk," and it becomes to a greater or less extent familiarized with the laxity, or rather the absence of moral and religious feeling among the

latter. This familiarity with the aspect and form of vice has a most injurious but insidious influence upon the moral faculties, perverting their manifestations and blunting their sensibility. Children are very susceptible of these evil effects, and the children of the operative class have not, neither can they have, as a rule, that constant maternal care which is essential to the thorough well-being of a child. The necessity which very commonly exists for every able member of an operative's family to aid in the maintenance of the family, renders it requisite that the child should be left usually in the charge of a younger member of the family, or of some person who does not possess that full interest in the welfare of the child which the mother alone feels. The child is thus left during a great portion of the day to seek its own amusement, almost uncared for, among its fellows in the streets and alleys, and there it has constantly thrown in its way waifs of the foul language, and hints of the foul habits of the "street-children," which it too readily adopts, while the grosser passions of the child, in great measure uncontrolled, are rapidly developed. Even during the school-days of children of the operative class the moral faculties are too frequently still further stunted, for the education consists often of the rudimentary forms of learning alone, the moral faculties being left altogether untitled, or if titled, the process is of so imperfect a character as to interpose only a slight obstacle to the evil influences to which the child is exposed.

It is in childhood that the greatest mischief to morality is done. The susceptibility of the child to sensuous impressions, and the inordinate development of the passions in comparison to the intellect and moral faculties, is the chief cause of that blunted moral sensibility which is observed in after-life in almost all classes of society. The after-play of the organism by means of which mental action is displayed is determined chiefly in childhood and youth, and if the passions be developed disproportionately to the intellect and moral faculties, the disproportion is commonly continued to the remotest period of life. If, indeed, the action of any portion of the material framework of thought be exaggerated or warped in youth, its effects will be manifested to a greater or less extent ever after. The influence which is exercised by the netter class upon that portion of the operative class with which it is most closely brought into contact tends to blunt the moral susceptibilities of the class, and, according to our own observation, it contributes in a marked degree towards the formation of that weakened sense of morality which is found prevalent among a large section of the operative class.

The netter class also exercises an indirect but important influence upon the commercial class. A large number of the retail

dealers who supply the nether class with articles of consumption are of that class, and consequently partake of all its habits and feelings. But, in addition, the wants of the nether class are supplied by numerous tradesmen who possess education and substance, but who practise to an extraordinary extent those petty frauds of trade (petty in name only) which consist particularly in the adulteration of food and drink. The nether class suffer much from these frauds, and the inability of individuals of the class to protect themselves, their ignorance, and their desire, from poverty, to obtain cheap articles, forms a great temptation to tradesmen to practise a system of petty fraud for the augmentation of trade profits. The system of petty trade frauds is not confined to the tradesmen dealing principally with the nether class, but it is found, perhaps, in greatest intensity among them. The majority of the petty trade frauds are, perhaps, practised by the retail dealer; but many of the more serious frauds, particularly in the adulteration of articles of consumption, cannot be carried out without the co-operation of the manufacturer or wholesale dealer; hence the system of petty fraud practised by the lowest branch of a trade is found to extend its influence through every branch of the same trade. The petty frauds common among shopkeepers form a *quasi*-justification for fraud which the street dealer is quick to seize upon:—

"It ain't *we*," remarked a street tradesman, "as makes coffee out of sham chicory; it ain't *we* as makes cigars out of rhubarb leaves; *we* don't make duffers' handkerchiefs, nor weave cotton things and call them silk. If *we* quacks a bit, does *we* make fortins by it as shopkeepers does with their ointments and pills? If *we* give slang weights, how many rich shopkeepers is fined for that there? And how many's never found out? and when one on 'em's fined, why, he calculates how much he's into pocket, between what he's made by slanging, and what he's been fined, and on he goes again. *He* didn't know that there ever was short weight given in his shop; not *he*! No more do *we* at our stalls or barrows! Who 'dulterates the beer? Who makes old tea-leaves into new? Who grinds rice among pepper? And as for smuggling,—but nobody thinks there's any harm in buying smuggled things. What *we* does is like that pencil you're writing with to a great tree, compared to what the rich people does."^{*}

In addition to the baneful influence to which the operative class is exposed by its more or less intimate connexion with the nether class, it is also liable to be affected by other agencies which tend to blunt or weaken the moral faculties. Of these agencies the confined dwellings of the class, and the physical requirements, if we may so speak, of relaxation hold a prominent place. One of the most powerful causes tending to blunt the morality of the operative class, is the house which has but one room, or the house which has only a single bed-chamber. When all the members of a family, parents and children, male and female, occupy the same apartment at night, it has the effect of deadening the sense of modesty and

* "London Labour and London Poor," p. 474.

decency among the children, and it leads to a weakening of the moral faculties and to an impurity of thought, the importance of which can with difficulty be appreciated to its full extent. Even the strictest religious training is barely sufficient to obviate the evil effects which may arise from this source. The sensual passions of children are very readily developed, even when the child itself knows nothing of the nature of the feelings which it experiences; but the single-chambered dwelling, or the house with one bed-chamber, occupied by several individuals of different ages and sexes, early gives a directive tendency to the sensual passions, and a proclivity to active immorality of the very gravest character. It is not, however, in the direct production of early overt immorality that the evil is most witnessed, but in a diminution of the feelings of modesty, and a proclivity to sensuality, which is shown, perhaps, in its most serious character among young females. The effects of this sensual proclivity may be readily witnessed in the lax conversation and manners which, short of actual immorality, occur in large mills or workrooms, where females of the operative classes are employed, and where no moral superintendence is exercised; but its worst effects extend into every grade of society. For, from the children of the operative class, the ranks of domestic servants are mainly recruited, and to the charge of these servants the children of the middle and higher classes of society, in infancy and early youth, are principally committed, and it frequently happens that the low grade of morality of the nurse or the housemaid either degrades or perverts the moral faculties of the most carefully trained child. The scene depicted in the "Winter's Tale" is but a faint outline of what frequently occurs in our own homes:—

Ant. Lady. Come, my gracious lord,
Shall I be your playfellow?
Man. No, I'll none of you.
Ant. Lady. Why, my sweet lord?
Man. You'll kiss me hard; and speak to me as if
I were a baby still.
Ant. Lady. Hark ye,
The queen your mother sends us; we shall
Present our services to a fine new prince;
One of these days; and then you'd *vanish* with us,
If we would have you!—*Act ii. sc. 1.*

The young man who begins to breast the world with a proclivity towards sensuality, derived from the circumstances of his childhood, be he poor or rich, usually leaves behind him a broad wake of sin; the young woman, to whatever class of society she may belong, is apt to be overwhelmed by the first heavings of passion or the earliest promptings of vanity. It is the blunted moral sense and the proclivity to sensuality which are the conse-

quences of defects in the early training of a child, that clogs our streets with prostitutes and our registers of births with entries of children born out of wedlock. In 1855, out of 85,532 births in London, 3455 were illegitimate; and in 1857 there were known to the police, also in London, 8000 prostitutes, and 2825 houses of ill-fame. The number of illegitimate births, and number of known prostitutes form, however, but imperfect gauges of the amount of unchastity among unmarried females in the metropolis. In 1851, 3203 children were born out of wedlock in London, and in the same year the number of unmarried women was 212,293. If this proportion of unmarried women living unchastely to every illegitimate birth, be the same as that of married women to every legitimate birth, it would follow that at least 15,000 (about 1 in every 15) unmarried women living in London in that year were unchaste.

The protracted physical labour of the operative induces a condition of mind, apart from education or religious instruction, which disposes him to seek relaxation in sensuous rather than intellectual pleasures. When we consider, therefore, the as yet comparatively slight extent to which sound education has permeated the operative class, and the insufficiency of the means which exist for the literary accommodation and intellectual gratification of the class, it will follow as a natural consequence that such instruction as the majority of the class possess will be applied rather to the purpose of gratifying the passions than the intellect, and that the readiest and least troublesome method of indulging the senses and passions will be adopted. The gin-palace and the beer-house, the flaming decorations of the one and the cosy looks of the other, outshining the contracted, and perhaps crowded cottage, are flocked to, and probably comic songs, glees, or other attractions may be added to the seductive influences of gossip and strong drink. Many may keep within due bounds and never exceed either in one indulgence or another by frequently visiting these resorts; but when we have strained off the temperate, there is invariably found a dark and dense deposit of drunkenness and debauchery, fringed with want and wretchedness, recklessness and idleness, and capped with crime.

But the most important source of the degraded morality found among the operative class is the deficiency of religious and moral instruction. A great portion of this class is not only unprovided with the means of religious education, but it is inaccessible to the majority of the means already in existence. It is the deficiency of religious and moral instruction which makes the influence of the agencies of which we have spoken so injurious to the morality of the operative class. The effects of surrounding circumstances in depressing the standard of morality among a class of people, is in direct proportion to the deficiency

in the religious and moral training of the class. The highest morality may coexist with the most unfavourable social conditions for the preservation of morality; but when there is a debasement of morality as a result of physical and social degradation, religious and moral instruction will prove of little benefit unless they are combined with measures for the promotion of physical and social improvement.

In 1848, an inquiry was made, by a committee of Fellows of the Statistical Society, into the condition of the labouring population of St. George's in the East, this parish being selected as affording an example of the average condition of the poorer classes of the metropolis. From the statistics obtained during this inquiry we may gather several illustrations of the remarks we have made upon the moral condition of the operative class of London. The total population of the district actually examined was 7711, of which number 8345 were children under 15 years of age. The number of houses occupied by this population was 1204, and the number of families inhabiting these houses, exclusive of single men and women lodgers, was 1802. Of these families, 636 occupied houses containing only one room, and 502 occupied houses containing two rooms. The number of individuals living in houses having only one room was 2025, that is 3·2 persons to each room; the number of individuals living in houses containing two rooms was 2454, that is 2·2 persons to each room. These figures indicate a considerable degree of crowding, but they convey but a slight notion of the actual amount of crowding which occurs in sleeping apartments where a family of several children exist. In the houses containing two rooms, one room only is, as a general rule, used as a bed-chamber.

Evidence was sought as to the religious and moral character of the people by an inquiry into the form of religion professed by the heads of 1954 families, and by ascertaining the character of the literature principally used by them. The heads of 1328 families professed to belong to the Church of England; 64 to the Wesleyan Methodist Society; 177 to other denominations of Dissenters, 143 to the Roman Catholic Church, 35 were Jews, 150 professed no religion, 2 were Mahomedans, and of 30 the religion was not ascertained. "This extensive profession of attachment to the Gospel," remarks the Committee, "is a hopeful sign, though the limited extent to which the Wesleyan and other denominations of Dissenters appear to have penetrated into this mass of population, is rather remarkable, and will justify a feeling of doubt with regard to the profession made by some of belonging to the Established Church." This doubt is in a great measure confirmed by the evidence upon the means of spiritual instruction in the parish of St. George's in the East, given by the incumbent of the parish church and others before a Select Committee of the House of Lords last session. It would appear that the number of sittings already provided by the Church of England in St. George's in the East is 5,880, and that 18,019 additional sittings are required in order to provide for those who are not accommodated by any religious body. The parish church will seat about 1200 persons, but the incumbent states that it is not well attended. The average number of communicants at noon on Sunday is from 40 to 50; and the average number of attendants upon the week-day evening services is from 20 to 30, generally of the poorer classes; indeed, of those who attend the whole of the services, the larger proportion are, relatively, of the poor. The number of attendants at two rooms, which have been licensed for Divine service in the parish, would appear to be also small. At one service 30 individuals were counted in one of the rooms, and 48 were present at another time.

In 1860 families the Committee of the Statistical Society ascertained that the reading was confined almost wholly to newspapers, in 12 families only were other miscellaneous prints taken in, and in 29 only no newspaper what-

ever was taken. Upon these results the Committee remark, "This is not a cheering picture; the great use made of the capacity to read being, as far as this statement indicates, in ministering to mere excitement." The total number of books found in the district was 13,993, and these were distributed among 1951 families, 564 appearing to possess no books. Of the books, 59 were theatrical, 5,791 are classed as serious (including the Holy Scriptures and books of prayer), and 8153 as miscellaneous. It is not possible to ascertain statistically to what extent the "serious" books were read, but the impression of the agents of the committee was that, "in far the greater number of families which they visited, of all the books which they found in them, the Bible and Testament were those least read."

Of the children, 1266 attended infant, dame, and day schools, and 571 Sunday schools, and the payments of 1012 families for the schooling of their children did not exceed one shilling weekly.

In dealing with the moral pathology of the nether and operative classes of the metropolitan population, we have to do with results which are, in the main, the direct consequences of the social circumstances under which those classes are placed, and of a lack of true moral knowledge. But when we come to consider the indications of perverted morality which are found among the middle and aristocratic classes, it might be supposed that we should find that both crime and immorality had a more individualized and isolated character—that, indeed, crime and immorality would be seen rather as the result of individual depravity, than as a consequence of general social conditions inducing depravity. For the middle and higher classes do not lack, in appearance, either the means of both intellectual and moral knowledge, or the knowledge itself. When, however, we dip a little below the surface, we shall find that, as among the nether and operative classes, so among the middle and aristocratic classes, crime and immorality are mainly but the scum which floats upon the surface of loathsome pools of degraded and perverted social conditions. There are doubtless many and grave instances of individual depravity which have set at nought all training in uprightness, and that have broken through all the restraints of law, human and divine; but, as a rule, we may trace how acts of crime, and open immorality are ordinary consequences of the social conditions under which the individual has existed, and of a proclivity to vice due to defects in early training, or to evil influences acting in childhood and youth.

If we search into the method in which many trade transactions are ordinarily prosecuted, we at once obtain an important clue to the normal moral condition of many branches of the commercial class. In the evidence given on the Adulteration of Food and Drink before a Select Committee of the House of Commons in 1855, it was shown, with particular reference to London, that it was almost a general rule among the dealers in many of the most important articles of consumption to sell those articles in a more

or less adulterated state, by which the value of the articles as food was diminished. Again, the formidable commercial disasters which have occurred during the last three or four years from fraudulent bill and banking transactions, and from malversations of funds, have shown that the lax principles of trading which led to such frightful disasters during the "railway mania," were no temporary principles, arising at the moment and disappearing with the occasion which seemingly gave rise to them, but that they were constantly present among the commercial class, and that the railway, bill-transaction, and banking disasters were epidemic manifestations of a low grade of trade morality.

It is not possible to state to what extent the degraded morality, of which the transactions mentioned are examples, prevails among the commercial class, but we know that men who have stood high in their particular class of business, and who have been esteemed of unblemished fame by the world,—men, indeed, who have been

"Magnificently good,

And held their heads up high like a giraffe,"

have fallen from practices which have resulted from this low grade of morality.

There is a common phrase in use among almost every section of commercial men, the "custom of the trade," which, upon examination, is often found to apply to a custom which has for its object the enhancing of the value of goods or property dealt in, by some market or business sleight, totally apart from the value of the goods or property. Several of these trade customs, as for example, the adulteration of articles of food, and certain lax proceedings of the share-markets, and in the use of accommodation bills, have become so rooted in many commercial transactions as to have become truly legitimate acts of trade, according to common usage. Nay, there is even an inner trade morality of these customs of the trade by which it is commonly understood that within certain limits only the trade practices referred to may be carried out. Now it is just in these little trade customs which have grown up from certain usages, and which are familiarly practised in many trades, that we have the germs of the majority of the huge frauds which arise out of inordinate speculation. In its ordinary form the little trade custom may be practised by every member of a trade alike, and with the majority of those who have been trained to this common morality of petty fraud, the usage which has taught them to practise it, has also sufficient power to keep them within the bounds which usage is pleased to dictate. But let inordinate desire for gain step in, let speculation become rife, let a temporary difficulty stand in the way which ordinary trade resources cannot remove, and the

sleights legitimized by the common custom of trade are apt to come forth in their true light. The barrier set up by usage cannot well withstand the pressure of necessity, and a "wicked whisper" is never wanting to suggest that if the fraudulent trade custom be right in principle in its less obtrusive form, it cannot be wrong in a more fully developed character; and the "honeyed hope of retrieving," (to use the words of John Sadleir's death confession) ever brightens the downward path with a delusive light.

The most remarkable study respecting petty fraud trade customs is the fact of their being practised frequently by men of religious habits. There is no doubt that there are many tradesmen who practise sleights of trade knowing them to be dishonest and with a dishonest intent; but there are also many tradesmen who practise sleights simply as trade customs in which they have been brought up, and who seem to be utterly ignorant, or incapable of appreciating their fraudulent character.

It would be painful to suppose that the wide-spread practice of adulteration of articles of food, which was shown to exist in the metropolis among all classes of dealers, by the Analytical Commission of the *Lancet*, was in every instance a deliberate act of dishonesty. The names and characters of many of the firms from whom articles were purchased for analysis would not justify such a supposition, unless we are prepared to adopt the conclusion of a perverted condition of morality existing among the middle class of London to which even that of the nether class is of a secondary character. The truth is, we believe, that these men have been taught from their earliest days to regard these practices as legitimate trade customs; they have grown up in this belief; it has never been tested by any other criterion than that of the trade; and the practice has become part and parcel of their normal mental and moral state, casting no dark shadow across their religious belief, and continuing until death, or until a popular outcry leads to an examination of the custom, or an Act of Parliament prohibits it, and so rouses, perchance, an individual to a true knowledge of the petty fraud he has been practising. It is to the existence of an insensibility to the fraudulent character of many trade customs, that we attribute those distressing scenes in which individuals who have brought upon themselves public obloquy by a fraudulent trade transaction, and even, perhaps, have been tried for it and convicted in a court of justice, have been retained in the full confidence of the religious body they have been connected with, and have received wide-spread sympathy from the branch of trade with which they have been connected, because they have acted simply in accordance with the "custom of the trade."

The habit of petty fraud which is but too commonly found to

constitute the so-called "custom of the trade," forms frequently the particle of ferment which is ever ready to ferment actively under favourable circumstances, and to give rise to a more or less abundant crop of fraudulent commercial transactions.

But the low grade of morality of which certain trade customs are an indication is not manifested in those customs alone. They are the natural result of a degraded morality, but they are most commonly met with side by side with careless and indifferent feelings towards the requirements of strict morality generally. This indifference is indeed the main form in which a low grade of morality is found among the middle and higher classes of society. Conventional morality, that is, propriety both in speech and manners, is now almost an essential requisite of every section of the middle and higher classes of society, and formal religion has become fashionable; yet, with all this improvement, a vast amount of immorality still nestles within the skirts of the middle and higher classes, and is tolerated by them—nay, it would appear to be expected by a considerable portion of these classes that youth should go through a certain portion of immorality, as a matter of course, before it comes to manhood, the so-called "sowing of wild oats" being, in fact, regarded as a normal phase of humanity.

The laxity of morals which exists among the youth of the higher and middle classes of society is partly the result of the indifference with which it is regarded by a large section of society, and partly a consequence of the education given to the youth. The education is directed more to the cultivation of the intellectual than of the moral faculties. Such training as is given to the moral faculties, when these are not altogether, as is often the case, left to be formed simply by example at home or at the schools, is almost invariably of a most imperfect character. It consists usually in the teaching of the bare precepts of morality, and it is rarely accompanied by any satisfactory training in the application of those precepts. If the moral faculties, so far as developed, have not already been perverted, as is not unfrequently the case, before the youth has left school and commenced to rough it in the world, he enters into the struggle of life almost altogether ignorant of the peculiar dangers he is exposed to, and consequently liable to become a prey to the first temptation that falls in the way.

"She (my mother) brought me up to pray and hope that I might some day be converted, and become a child of God. . . . And one could not help wishing to enjoy oneself as much as possible before that event happened. 'Before that event happened, my dear fellow? Pardon me, your tone is somewhat irreverent.' 'Very likely. I had no reason put before me for regarding such a change as anything but an unpleasant doom, which would end me off, or ought to do so, from any field sports, from poetry, from art, from science, from

Abstract principles of morality, of which the significance and application are imperfectly apprehended, offer but slight obstacles to the evil effects of sensual pleasures. Moreover, the practice of morality being left to be formed chiefly after entrance into active life, the youth is apt to take example from that form of practice which is least exacting. A morality of this species sees no wrong in those gambling transactions, so fruitful of ruin, depravity, and crime, which constitute a marked characteristic of many of the amusements of the higher classes, and particularly of those connected with the so-called "sporting world," and it justifies a special code of morality for the guidance of such transactions, this code being the analogue of the "custom of the trade" among the commercial class. But a main character of this low grade of morality (which might with truth be termed secular morality) is, that it nourishes an appetite for pleasure, using that word in the conventional acceptation of the term as applied to popular amusements. Secular morality, however, offers but a feeble resistance—nay, it too frequently co-exists with a tendency to succumb to the more pernicious effects of pleasure. A striking example of the insidious and dangerous character of this degraded morality is witnessed at the present time, among the highest classes of society, in the patronage and support which has been given to the opera of "*La Traviata*," the "*Street-walker*." In this opera is represented an episode in the life of a common prostitute, in which an overweening attachment, less noble in character than that of a dog to its master, is upheld to admiration and sympathy; and Christianity is parodied in a fashion little short of being blasphemous, by this attachment being exhibited as a sufficient justification for sin and preparation for heaven!

The commoner effects of the low grade of morality existing among the middle and higher classes may be seen in their most

politics—for Christians, I was told, had nothing to do with the politics of the world,—from man and all man's civilization in short, and leave to me, as the only two lawful indulgences, those of living in a good house and begetting a family of children.' 'And did you throw off the old creeds for the sake of the civilization which you fancied they forbid?' 'No. . . . I am a Churchman, you know, principally on political grounds, or from custom, or from—the devil knows what, perhaps—I do not.' 'Probably it is God and not the devil, who knows why, Templeton?' 'Be it so. . . . Frightful as it is to have to say it. . . . I do not much care. . . . I suppose it's all right; if it is not, it will come right at last. And, in the meantime, I compromise, like the rest of the world. . . . And so, I believe, I am going to have no religion at all, and no substitute for it either. . . . I am becoming more and more of an animal,—fragmentary, inconsistent, seeing to the root of nothing, unable to unite things in my own mind. I just do the duty which lies nearest and looks simplest. I try to make the boys good, plucky, and knowing—though what's the use of it? They will go to college with even less principles than I had, and will get into proportionately worse scrapes. I expect to be ruined by their debts before I die.'"—*Phaeton; or, Loose Thoughts for Loose Thinkers*, by C. KINGALEY, pp. 75—80.

conspicuous characters in the casinos and principal haunts of vice in the metropolis. These grand portals of iniquity are crowded nightly with our youth. Here they graduate in sensuality and vice; and to the crash of music, and the quick paces of the dance, they are whirled rapidly into a vortex of sin, in the inner whirl of which is found a depravity which, sooner or later, leads to ruin. But few may pass even into the outermost whirls of the vortex and thereafter escape fully from the taint of dark vice. The moral faculties are still further blunted by the briefest acquaintance with these haunts, and the lessons of sensuality learnt in them are carried into domestic life, and the terrible results of these lessons are from time to time made known in the records of the Divorce, Criminal, and other Courts of Justice.

The great number of splendid resorts for the mere gratification of sensual desires which exist in London, are at once an indication of the extent to which a low grade of morality exists among the middle and higher classes, and a cause of the maintenance of that low grade. These resorts are not the less dangerous because they are conducted, in the main, with due regard to external propriety. The splendid drinking-saloon, with its attractions of song and music, most surely induces the insatiate craving for strong drink, with the necessary concomitants of drunkenness and allied vices; and the dancing-saloon most certainly paves the way to the innermost recesses of iniquity, though the externalisms of decency may never be departed from within it. Nay, the very aspect of grace which is thrown over these resorts adds but to the subtlety of the evil:—

“The devil's most devilish when respectable.”

Sensual gratifications and pleasures are at the best but treacherous indulgences; and the man who has been most carefully trained in the right may hardly at times hold his own against them. But when these pleasures are heightened by careful development, when they are divested of every moral check beyond the ordinary requirements of secular morality, and when their object is merely to minister to the gratification of the moment, then they may become most pernicious.

The low grade of morality which pervades a large portion of the middle and higher classes, is not shown alone in an undue proclivity to sensual gratifications, and in the fostering of dubious special codes of morality, of which the extreme results are crime and overt immorality. These are its most prominent effects; but its influence is also widely and most injuriously felt in an active tendency to depress the standard of religious practice, and in a lowering effect upon the morality of the operative and nether class, by degrading the bonds of relationship between the master

and the servant, between the workman and his employer, and between the landlord and tenant—these bonds being too commonly regarded as having no higher character than personal service on the one hand, and pounds, shillings, and pence on the other.

Of the different results which arise from the low grade of morality that prevails, to a greater or less extent, among all classes of the metropolitan population, one only—*crime*—can be estimated numerically. The amount and character of the crime which occurs in London from year to year, as well as the number of persons arrested, convicted, and punished, are recorded in the returns of the City of London and of the Metropolitan Police (the police of the metropolis consisting of two principal divisions, the duties of one of which are confined to the comparatively contracted area of the City of London proper, while the duties of the other extend to the remainder of the metropolis), and in the "Judicial Statistics" which are compiled by order of the Secretary of State for the Home Department.* From the latter source it would appear that, in 1857, 8452 indictable offences were committed in London, and that for these offences 6618 persons were apprehended, of whom 2973 were discharged, 3 were bailed, 73 were bailed for trial, 24 were committed for want of sureties, and 3543 were committed for trial. In the same year there were arrested, also in London, for offences with which the magistrates dealt summarily, 103,671 persons (71,975 males, 31,696 females), of whom 47,620 were discharged, and 56,051 convicted. The whole number of arrests for indictable offences, and for offences with which the magistrates dealt summarily, was, during the year, 110,289, which would give an average of somewhat more than 302 arrests daily. The character of the persons arrested and proceeded against, as far as could be ascertained, was as follows:—

—	Known thieves.	Prosti- tutes.	Vagrants and tramps.	Suspi- cious cha- racters.	No known occu- pation.	Previous good cha- racter.	Charac- ter un- known.
Indictable offences .	749	393	56	2,070	82	1,215	2,053
Offences summa- rily disposed of }	9,898	5198	4107	11,547	1488	24,582	46,851
	10,647	5591	4163	13,617	1570	25,797	48,904

* The writer of the article "On the Moral Pathology of London" would here express his thanks to Sir Richard Mayne, the Chief Commissioner of Metropolitan Police, and to Samuel Redgrave, Esq., the Criminal Registrar at the Home Office, for their kindness in furnishing him with the criminal statistics made use of in the article. To Mr. Redgrave belongs the honour of having drawn up, and, we believe, also, suggested the series of returns published by Government under the title of

Thus 1 in every 10·4 of the individuals arrested belonged to the criminal class; 1 in every 4·04 was of bad or indifferent character, and 1 in every 4·07 was of previously good character. Nearly two-thirds of the whole number of persons arrested were formerly individuals of previously good character and of whom the character is unknown; and doubtless the greatest portion of these are to be regarded as having for the first time committed offences, or been suspected of having committed offences against the law. The statistics of character are not applied to persons actually convicted of crime, consequently we cannot estimate with any nearer degree of correctness than that given in the foregoing table, the number of new criminals added to the police-lists during the year; but the data are sufficient to show the great preponderance of persons who for the first time had brought themselves within the grasp of the law. Perhaps the most remarkable item in the table is the number of prostitutes arrested. The number of prostitutes known to the police in 1857 amounted, as has been previously stated, to 8600. It follows, therefore, that more than two-thirds of the whole number were under arrest during that year.

The "Judicial Statistics" for 1857 contain, for the first time, the Criminal Returns of the London Police, consequently these cannot be compared with any previous statistics of a similar character. We have at our command the Criminal Returns of the Metropolitan division of Police only, and the following data are derived from this source. As these details apply only to a portion, although by far the greatest portion of the metropolis, it must be borne in mind that they show simply, approximately, the variation in amount and character of the crime of London.

In 1857 the Metropolitan Police took 79,364 persons into custody, of whom 37,564 were discharged by the magistrates, 38,731 were summarily convicted or held to bail, and 3069 were committed for trial, of whom 2460 were convicted and sentenced, 502 were acquitted, and 107 were not prosecuted, or bills were not found against them. During the five years, 1852-56, the annual average of arrests was 72,586; of persons discharged by the magistrates 37,361; of charges summarily disposed of, or held to bail, 31,014; of committals for trial, 4210; of convictions, 3467; of acquittals, 624; and of charges not prosecuted, or bills not found, 117. The gross amount of arrests and of cases summarily disposed of and committed for trial in 1857 is, therefore, considerably in excess of the gross annual average of arrests and of charges summarily disposed of and committed for trial during the preceding five years; and although a decrease appears in the amount of committals in 1857, this is

"Judicial Statistics." In the recently published volume of these statistics the criminal returns only for England and Wales are given, but in subsequent volumes it is intended to publish returns also of the proceedings in the Common Law, Equity, Canon, and Civil Law Courts. When the whole of the returns projected by Mr. Redgrave are completed and regularly filled up, the statistics of justice in this kingdom will probably be more complete than those of any other kingdom.

probably due to the larger number of cases disposed of summarily by the magistrates. Does the increase in the amount of crime during 1857 above the average of the preceding five years indicate an actual increase in the quantity of crime in London, or an increase proportionate only to the increase of population during that and the previous years? Estimating the population roughly by adding the excess of births each year to the population of the previous years, commencing with the ascertained population of 1851, we arrive at the following results:—

Population of London, according to the Census of 1851, 2,362,236.

—	Excess of births.	Population.	Number of arrests.	Proportion to population.	Number of summary convictions & committals.	Proportion to population.
1852 . .	26,612	2,388,848	73,257	1 in 32·06	34,985	1 in 68·02
1853 . .	22,185	2,411,033	72,316	1 in 33·03	34,695	1 in 69·04
1854 . .	11,188	2,422,221	75,614	1 in 32·00	35,245	1 in 68·07
1855 . .	23,590	2,445,811	68,605	1 in 35·07	33,655	1 in 72·03
1856 . .	20,893*	2,466,704	78,240	1 in 33·06	36,689	1 in 67·02
1857 . .	20,893*	2,487,597	79,364	1 in 31·03	41,800	1 in 59·09

* Average of the four years, 1853–55.

If these calculations be received as an approximation to the proportion of arrests, summary convictions, and committals, to the total population for the years 1852–57, it will follow that there was a considerable excess in the amount of arrests, summary convictions, and committals during 1857. It would also appear that in 1855 there was a considerable diminution as well in the number of arrests, as of the summary convictions and committals.

The offences which come under the cognizance of the police are divided in the official returns into six categories. In the first category are enumerated "Offences against the person;" to wit, murder, attempts to murder, manslaughter, rape, bestiality, and other libidinous crimes, extorting money under threats of violence, common assaults and assaults on the police, attempting to commit suicide, &c. The second category contains "Offences against property committed with violence;" for example, burglary, breaking into dwelling-houses, shops, &c., robbery, assaults with intent to rob, &c. The third category contains "Offences against property committed without violence;" for example, larceny, cattle, sheep, and horse stealing, embezzlement, receiving stolen goods, unlawful possession of goods, &c. The fourth category contains "Malicious offences against property;" to wit, arson and wilful damage. The fifth category contains "Forgery, and offences against the currency." The sixth category contains "Other offences not included in the foregoing categories;" for example, drunkenness, drunk and disorderly characters, vagrancy, disorderly characters, offences under the Metropolitan Police Act, the Hackney Carriage Act, the Juvenile Offenders Act, &c.

The number of persons who were (a) summarily convicted or held to bail, or (b) committed for trial, in each of the different categories in 1857 was as follows: I. *Offences against the person* (a 7750, b 284) 8034; II. *Offences against property committed with violence* (b) 293; III. *Offences against property committed without violence* (a 9417, b 2143) 11,550; IV. *Malicious offences against property* (a 1941, b 15) 1956; V. *Forgery and offences against the currency* (b) 292; VI. *Other offences not included in the above classes* (a 18,403, b 39) 18,435. The annual average of the number of persons summarily convicted and held to bail, or committed for trial in the different classes of offences, during the five years, 1852 to 1856, was as follows: Class I. (a 6146, b 267), 6683; Class II. (b) 255; Class III. (a 6046, b 3409), 9455;

Class IV. (*a* 1448, *b* 7), 1495; Class V. (*b*) 306; Class VI. (*a* 17,462, *b* 25), 17,487. In each class of offences, with the exception of the fifth class (Forgery and offences against the currency), there was an excess in 1857 above the mean of the previous five years.

The total number of persons who were upon trial, convicted and sentenced in 1857 was 2460; the mean annual number of convictions upon trial during the five years, 1852-56 being 3467. On the other hand, however, the number of offenders summarily dealt with, or held to bail, by the magistrates in 1857, was 38,731, while the annual mean of the preceding five years was 31,014; showing, as has been previously intimated, that the diminution of the amount of convictions after trial was due to a larger number of charges being dealt with summarily by the magistrates.

The crimes which seem to be most influential in determining the increment or decrement of the amount of crime, are those which are dealt with summarily, as may be gathered from the following statement of the number of individuals summarily convicted or held to bail, and committed for trial during the five years, 1852-57:—

—	Summarily convicted or held to bail.	Committed for trial.	Convicted and sentenced.
1852	30,327	4968	3613
1853	30,941	5159	4304
1854	29,796	3859	3169
1855	33,451	3238	2587
1856	38,731	3069	2460

The annual average of summary convictions during the five years is 32,649, and the greatest excess above the average (in 1857) was 6082; but the difference between the lowest number of convictions in the period and the highest is no less than 8935, the variation in the number of committals being 2090, while the annual average of committals was 3938.

The offences for which the greatest number of persons were convicted in the six years, 1852-57, are set forth in the following table:—

—	1852.	1853.	1854.	1855.	1856.	Mean of the five years.	1857.
Drunkenness and drunk and disorderly characters	8366	8240	7273	6376	6306	7812	7759
Disorderly characters and disorderly prostitutes	3949	3955	3630	3562	4008	3820	4689
Vagrancy	2168	1860	2065	1628	1956	1936	2486
Suspicious characters and reputed thieves	869	830	798	871	1025	678	1099
Common assaults and assaults on the police	6436	6188	6280	6921	6138	6392	7505
Larceny	2491	3170	3772	2755	1907	2819	1765
Unlawful possession of goods	3694	4317	5765	5019	8160	5551	8817
Wilful damage	1857	1982	1456	1504	1742	1484	1941

The greatest number of convictions for particular offences occur for drunkenness, drunk and disorderly conduct, common assaults, assaults on the police, the unlawful possession of goods, and disorderliness.

The drunk, and drunk and disorderly characters hold the most prominent position in the list of offenders,* but the figures in the foregoing table give but an imperfect notion of the extent to which the vice of drunkenness prevails openly. The following table shows the number of arrests and convictions for drunkenness, and drunk and disorderly conduct during the ten years, 1848-57, as well as certain incidental data which will aid in the formation of a better comprehension of a few of the evils which arise from habits of indulging to excess in spirituous liquors:—

—	Drunkenness & drunk & disorderly conduct.				
	Arrests.	Summary convictions.	Males.	Females.	Illicit distillation.
1848	16,461	4956	3185	1771	46
1849	22,027	6849	4457	2392	89
1850	23,897	8342	5586	2756	100
1851	23,172	8027	5129	3898	100
1852	23,640	8366	5526	2840	90
1853	23,652	8240	5464	2776	50
1854	22,678	7273	4806	2472	56
1855	19,297	6376	4025	2351	65
1856	18,703	6305	3796	2509	27
1857	20,047	7759	4790	2969	18

—	Number of public-houses and beer-shops summoned by the police, and the number convicted and dismissed.			Deaths from intemperance.	Deaths from delirium tremens.
	Convicted.	Dismissed.	Total.		
1848	762	158	920	57	141
1849	1125	247	1372	62	164
1850	1085	269	1354	74	157
1851	960	226	1186	64	136
1852	1293	321	1614	73	148
1853	1138	263	1401	73	152
1854	1067	290	1357	84	174
1855	718	256	974	83	164
1856	881	229	1110	—	—
1857	917	235	1152	—	—

The following table shows the number of convictions during the ten years, 1848-57, for several of the most serious offences against the laws:—

* The offence for which the greatest number of persons were arrested, in the whole of England and Wales, during 1857, was *assault*. It must not, however, be inferred, therefore, that there is an excess of drunkenness and drunk and disorderly characters in London as compared with other districts, or with the whole of the kingdom, for the arrests for drunkenness, and drunk and disorderly characters will depend upon the activity and efficiency of the police, and will be greater in proportion in cities and large towns than in country districts. It is not improbable that when the arrangements for the rural police have been fully carried out, we shall find an increase in the number of arrests for drunkenness, and drunk and disorderly characters, in the criminal returns for the whole kingdom.

—	Murder.		Attempts to murder.		Man-slaughter.		Rape, and assaults with intent to commit rape.	
	Com.	Conv.	Com.	Conv.	Com.	Conv.	Com.	Conv.
1848	13	5	78	60	14	3	37	29
1849	17	7	80	65	21	11	27	17
1850	6	4	73	56	18	9	32	18
1851	13	9	74	55	21	13	49	32
1852	11	6	72	60	15	6	45	29
1853	7	2	64	47	10	5	21	16
1854	10	5	46	36	13	6	28	12
1855	12	6	60	56	18	6	15	9
1856	11	6	62	50	8	4	19	11
1857	13	9	71	62	13	5	31	18

—	Burglary, and breaking into dwelling-houses, &c.		Robbery.		Forgery and offences against the currency.	
	Com.	Conv.	Com.	Conv.	Com.	Conv.
1848	188	154	100	82	208	190
1849	188	156	48	37	447	120
1850	195	162	65	44	154	136
1851	162	131	79	54	290	190
1852	187	149	46	35	315	282
1853	166	138	42	33	300	277
1854	196	168	54	39	377	366
1855	151	132	56	42	251	216
1856	276	239	98	76	289	237
1857	218	192	73	55	302	246

If we divide this table into two quinquennial periods, and ascertain the mean number of convictions for the different offences enumerated in each of the periods, we shall find that, during the five years, 1853–57, the mean number of convictions for all the offences, except burglary and breaking into dwelling-houses, &c., and forgery and offences against the currency, is less than in the five years, 1848–52:—

	Murder.	Attempts to murder.	Man-slaughter.	Rape, &c.	Burglary, &c.	Robbery.	Forgery, &c.
	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.
1848–52	6·3	59·1	8·2	25·	150·2	50·2	183·3
1853–57	5·3	50·1	5·1	13·1	173·4	49·	222·1

If these figures might be taken as indices by which to measure the actual quantity of offences committed, they would show a gratifying decrease in the amount of serious crime in the metropolis. In the absence, however, of data showing the actual number of grave offences which have occurred, conclusions derived from the number of convictions, as to the amount of crime, must be received with caution.

The ages, sex, and degree of instruction of the persons convicted during the five years, 1853–57, are set forth in the following tables:—

A G E.											
1853-57 . . .		<div>Under 10 years.</div> <div>10 to 15.</div> <div>15 to 20.</div> <div>20 to 25.</div> <div>25 to 30.</div>									
		518		12,299		34,480		39,349		26,308	
		30 to 40.		40 to 50.		50 to 60.		60 and upwards.			
		36,179		19,086		7891		3409			
S E X.											
1853-57		<div>Under 10 years.</div> <div>10 to 15.</div> <div>15 to 20.</div> <div>20 to 25.</div> <div>25 to 30.</div>									
		M. F.		M. F.		M. F.		M. F.		M. F.	
		465 53		11,158 1141		25,985 8495		27,339 11,960		16,621 966	
		<div>30 to 40.</div> <div>40 to 50.</div> <div>50 to 60.</div> <div>60 and upwards.</div>									
		M. F.		M. F.		M. F.		M. F.			
		22,304 13,075		11,656 7400		5078 2840		2215 1194			
I N S T R U C T I O N.											
		Total.		Neither read nor write.		Read only, or read and write imperfectly.		Read and write well.		Superior instruction.	
		M. F.		M. F.		M. F.		M. F.		M. F.	
1853-57...		123,781 55,598		21,410 13,280		91,823 40,997		9424 1327		1124 44	

The ages of 20 to 25 and 30 to 40 include the greatest number of persons convicted; and, of the whole amount of criminals, the largest number were under 30 years of age. The increase and decrease of crime in a district is due principally to the criminality of individuals of mature years—of those, in fact, who have arrived at an age when they become most fully exposed to the vicissitudes of life. The proportion of female criminals is large, being somewhat more than one-third of the whole amount. The bulk of the criminals consisted of persons who had received an imperfect education. This is the rule among the criminal class. A vast amount of instruction of a most unsatisfactory character, and in which the moral faculties, in particular, are neglected, prevails among the lower classes and also among the middle class; and it is from individuals who have received this spurious education that the criminal class chiefly derives its additions.

The statistics of felonies against property constitute a very interesting portion of the Police Returns. In the following table is given a summary of the number of felonies which occurred during the five years, 1853-57, the number of convictions for felony during the same period, the first amount of loss, the amount recovered, by the police, and the total amount of loss:—

—	Number of felonies.	Number of persons tried and convicted.	Amount of first loss.	Amount recovered.	Amount of total loss.
1853	11,699	2728	£41,988	£12,458	£29,530
1854	13,765	3341	49,898	9,780	40,000
1855	14,175	2535	49,996	10,216	39,780
1856	15,621	2029	53,193	11,363	41,830
1857	16,551	1808	51,832	10,577	41,255

The particular felonies of which summaries are given in the foregoing form a curious list. The following table shows the number and character of the felonies committed in the Metropolitan Police district during the year 1857:—

Description of Felony.		Number.	Number of persons tried and convicted.	Amount of loss.		
				First loss.	Amount recovered.	Total loss.
				£	£	£
	Burglary	129	127	2004	618	1386
	With violence to persons ...	—	2	—	—	—
	By lifting windows or entering doors not fastened ...	26	26	1042	28	986
	Breaking into a dwelling-house, &c.	40	39	400	124	356
	Building, shop, &c.	107	31	695	112	573
	*Embezzlement	909	161	1831	192	1839
	*Forgery	20	26	253	14	269
	*Fraud	529	92	2783	319	2464
	Robbery on highway	21	44	47	12	35
	Horse stealing	24	16	488	401	87
	Cattle stealing	9	5	90	74	16
	Sheep stealing	30	8	84	44	40
	Dog stealing	17	—	99	28	71
	Goods, &c. exposed for sale ...	2300	239	1908	780	1149
	Tools, lead, glass, &c. from unfinished houses	975	72	768	168	600
	From carts or carriages	351	24	833	230	603
	Linen, &c. exposed to dry	350	20	255	32	223
	Poultry, &c. exposed in an outhouse	817	64	735	187	568
	By false keys only	229	20	1753	65	1688
	*By lodgers	1540	74	4019	788	3231
	*By servants	1781	140	10,285	3017	7368
	By doors being left open	2570	209	5690	985	4805
	*By false messages, &c.	632	29	1835	184	1651
	By lifting up windows or breaking glass	611	30	2803	196	2407
	By attic windows, through empty houses	30	—	900	—	900
	By means unknown	119	8	236	15	321
	Picking pockets	1608	240	5229	1728	4091
	*From drunken persons	146	10	688	62	605
	From children	106	2	59	4	65
	*By prostitutes	854	79	3543	564	2978
	Larcenies on the River Thames ...	228	23	488	197	291
	Total	16,551	1808	51,832	10,577	41,255

It is evident that the cases marked thus (*) could not have been prevented by the police.

The number of convictions for felony during the years 1853-57 was 141; the ascertained loss of property from felony, in the same period, amounted to 192,464*l*. If we suppose that the whole of this sum (which should not be the case, as stolen property, except when money, can only be got off for sums much beneath its value) was divided solely among the number of individuals convicted for felony, 15*l*. and a few odd shillings only would fall to the lot of each person! Crime is, indeed, a most unprofitable occupation.

If the 12,441 individuals committed for felony during the quinquennial period, 1853-57, 3180 had been in custody for felony twice previously, 689 *icc*, 147 four times, and 53 five times and upwards.

The great increase in the total amount of offenders, as well as in the number of arrests and convictions for several of the slighter offences, which is shown in the preceding statistics to have occurred in 1857, and the decrease of arrests and convictions in 1855, are not susceptible of explanation by the information

which we at present possess. Perhaps the most important conclusion which may be derived from the criminal statistics of the metropolis is, that the greatest number of convictions and arrests occur for offences which arise from a low grade or a perverted state of morality, rather than from more deliberate criminality. This conclusion affords additional support to the propositions which we have endeavoured to set forth in this article.

In addition to the returns of the number of persons taken into custody, the offences for which they have been arrested, and the results of the arrests, the police also make certain "Miscellaneous returns," among which is included a report of the "Number of suicides committed, and the number attempted and prevented by the police and others."

The numerical records of suicide form a terrible illustration of the acuteness of the misery and sin which exists in the metropolis. The statistics of suicide are doubtless incomplete, as it is not improbable that many of those deaths, upon an inquiry into the cause of which a jury returned a verdict of "*Found dead*," have resulted from suicide. The number of instances in which a verdict of 'Found dead' was returned, in the county of Middlesex last year, was 535. The following table shows the number of suicides and attempted suicides in the Metropolitan Police District during the ten years 1848-57:—

	Number of suicides committed, and the number attempted and prevented by the police.		
	Suicides committed.	Suicides attempted and prevented by the police.	Suicides attempted and otherwise prevented.
1848	100	11	67
1849	131	15	60
1850	140	10	73
1851	120	8	67
1852	109	7	74
1853	131	7	110
1854	113	14	72
1855	116	13	60
1856	127	12	66
1857	154	6	87

We may add, as a pendant to this melancholy table, that in the eight years 1848-55, 242 persons died in the metropolis from *privation* of food, 49 from *neglect*, and 109 from *cold*.

In the preceding article our object has been to show the chief points connected with the etiology of a low grade of morality which we believe to exist extensively among all classes of the population of London (and, indeed, of the kingdom), and which we consider to be the substratum of crime and other forms of immorality. We have attempted to indicate the most prominent causes which, acting upon this substratum, determine overt acts, not only of crime, but of vice generally; and we have given a summary of the crime which has occurred in London during the last five years, as an illustration of one of the effects of the low grade of morality existing among the metropolitan population.

ART. III.—ON THE PSYCHOLOGICAL BASIS OF THE LANGUAGE OF ORATORS, POETS, AND PHILOSOPHERS.

BY A. F. MAYO, ESQ., BARRISTER-AT-LAW.

It is my object in this paper to suggest some distinction as to the varying necessities under which the orator, the poet, and the philosopher lie in regard to the possession of an abundant vocabulary. Some light may thence be thrown upon the necessities of the ordinary intercourse of mankind; for no man can talk with his neighbour without evincing the presence of mental ingredients, which in their highest energy become poetry, oratory, or philosophy.

The orator is frequently in want of language under the stringency of that very emotion which he must needs yield to if he is to animate his audience with kindred fire. The danger to which he is exposed is that, if he may not possess such a sufficient repertory of language out of which he may select the words which may paint the passing shade of intensified thought—what happens?—his inspiration may be suddenly chilled in consequence of his intellect being turned into a channel divergent from the main stream of his discourse. He has to let down his plummet into the depths of the ocean of language and laboriously to examine its contents. No longer like a ship careering over the surface, the orator is like the diver, subjected to the heaviest pressure of the element which he fain would master. How often those sympathies are chilled which, if they were rightly seconded by language, would carry the orator to the highest summit of success; unable at the lucky instant to marry his thought to burning words, what happens to him? He falls into some philosophic generality, from the cold trammels of which he is himself unable to escape; and all this from his impotence to find the right word at the right moment.

The consequence is that men of high philosophic power require, if they are to become orators, a copious vocabulary and a ready memory to evoke it, though the want of both is sometimes compensated for in the persuasiveness of an electric sympathy irradiating the most distant portions of the argument. Let me explain this more fully.

An orator who makes use of a general term because he is unable to find a more specific one, becomes himself entangled in that sense of the term which has least to do with the subject in hand, very much as the owner of a vast estate frequently envies the petty freeholder who owns the outlying angle which is wedged

into a corner of it. In the same way, a general term ever invites a philosophic mind to explore the remotest boundaries of its meaning. But this meaning is often the very one which has least to do with the subject in hand; and which is therefore also the feeblest in exciting the sympathies either of the orator or his audience. And thus it happens that the electric bond of sympathy which must have otherwise been indefinitely intensified becomes suddenly dissolved. The steed no longer feels the magic touch of a confident and easy sway; that sway has now become vacillating, uncertain, infirm.

Thus the orator has lost the command over his audience regarded as men of like passions with himself; and he can only now address their intellect, for this is the only principle which remains at work within himself. Nature ever throws her strength to the support of the weakest part; and for the moment, the weakest part of the speaker is his vocabulary. During the remainder of his speech, the speaker may still be the dialectician, and even the rhetorician; but he can become an orator again only by igniting his emotiveness from fuel derived from the central storehouse of inflammable associations. And as the captain of a vessel can by the process of tacking avail himself of the aid of nearly every wind that blows; so also the practised speaker can often from sources deep-laid within his own breast, yet most invisible to his audience, replenish the flame of his oppressed oratory.

Yet in this way, to regain a mastery over his audience, the orator must have a mastery over himself. If he cannot suborn it to his purpose of guiding the minds of his audience, the speaker must learn how decently to stifle the philosophic abstraction which perplexes him, he must quell the ambition that seeks in the forum the conquests of the study. But to do this well requires great skill, as much, in fact, as that which is required of a mason to conceal the junctures of his slab. A quick transition unexplained by point or contrast is as injurious to the orator as an obscure or indeterminate idea.

An orator, then, is bound to be acquainted with and thus also to predict the dip, direction, and the sensitiveness of his own intellectual compass; and he must be acquainted with the causes which are likely to deflect it. Thus he will learn in what way, when involved with an unmanageable idea, he may be able to expel it, if not indeed by main force, and the entrance by which it came, at any rate by some other; an orator's mind should in truth be like a theatre, facile in routes of departure as well as of access. Thus, if any idea cannot be suitably entertained, it should have an opportunity for departure, and this without decomposing the others.

A great speech may be likened to a game of chess ; the opening of the game affords us the choice of many well-trod paths the immediate consequences of each of which it is not difficult to predict ; it is towards the close that the energetic individuality of a great player is called forth.

So, in the commencement of a mountain ascent, the road is fair and open. The routes, whether convergent or divergent, have been scanned beforehand. The foundations of the mountain are comparatively of easy conquest. So, too, to a practical orator, the exordium is a work of art rather than inspiration. It is in the sudden emergencies provoked by the unseen depths of the emotions and thoughts of his audience that his proper prowess is evoked. As the regions of snow and ice are approached, no track will save the traveller from the necessity of labour ; though even then superior knowledge will enable him easily to cross ravines where former travellers have perished. And so it is at the climax of the speech, as in scaling the battlements about the mountain-top, that man's energies are strung up to the highest, or, failing in that, are relaxed into despair.

The same general considerations also apply to a poet, but with a difference.

The danger of the orator is, as I have shown, of breaking down, if the harmony between his emotive and logical powers is disturbed. The search for language induces an anxious interrogation of thought which mars the effect of his emotions. The discursive power of the orator varies with the ease and mastery with which he can control his ideas ; and I assume that it is in this discursive power alone that the orator has any confidence of being able duly to sustain his strain. On the other hand, the rapidity and harmony of the inventions of the poet depend mainly on the brightness of his associations, which are themselves connected with emotive agencies.

Again, while the loftiest flights of oratory are winged by the emotions, the greatest genius in poetry which the world has seen (I mean of course Shakspeare), sought its most fitting throne in the harmony of Nature herself ; and this is ever the appanage of the intellect proper in its function of the imagination.

The associations are ever-present aids to the poet ; and far from involving toil in exciting them, require that natural condition of the mind in which the will is passive. Now, the poet seeking no end but inspiration itself, can follow the association where the orator dare not do so, unless he can make them intellectually serve his end ; and the consequence of a failure in this I have shown.

There is another reason why an even tenor is more easily attained by the poet than the orator ; it is this—that the men-

tal conditions required of the poet lie more in one plane than those required of the orator. For instance, in a poem the tone is either intellectual or emotive, and no sudden emergencies necessitate the rapid changes which are obligatory upon the orator.

Add to this, that the poet can take his own time and recast his piece at leisure, opportunities which are denied to the orator under the stringency of sudden occasion. Thus the intellectual action of the poet, however intense it may be, requires less versatility in its management than is the case with the orator. The ideas of the poet, possessing a more natural flow of their own, the flow of the language corresponds in unity of tone and character; and the mind, in seeking a right expression, is not trammelled by that constant attention to the ideas themselves which the variety of their gesture renders incumbent on the orator.

As a set-off, however, to the poet's freedom from sudden occasions demanding a large and flexible vocabulary, there is in the superior intellectual possession which the ideas of the poet assert over his mind, a compensating necessity for a wealth of language. Sometimes, too, the absence of any immediate necessity to clothe those ideas which are silently matured in retirement, in the garb of language, may surprise the poet with an inability to convert his ideas into that current coin whereby alone they can affect the world; and this, too, at the very moment when they may vanish altogether unless so converted. And thus the poet may be in the plight of a miser who has been so intent upon the idea of his treasure itself, that he has mislaid the key of the very cabinet which contains it.

There are some peculiar considerations affecting philosophy, metaphysics, and deep speculation in general, in regard to their demands for richness in the vocabulary of language.

Let us see how the metaphysician stands in this respect as compared with the orator and the poet taken together.

A poet and an orator who are, both of them, intellectually deficient—the one feeble in his imaginative—the other feeble in his dialectic powers, can each of them succeed better with a given vocabulary than a strong poet or a strong orator, at least in the first instance. For long use and training of their respective endowments will at last give the strong poet and the orator knowledge of their own strength, and they also will obtain the power of making their intellectual energy tell in the production of clearness as much as of profundity of conception, thus enabling them respectively to convert what was at first only a command over processes of thought, into a command over the resources of language; just as the increasing skill of the hardy workman, who became such from mere strength of arm, will at last engage him

in delicate manipulations, to which in the first instance he may have been incompetent from deficiency in a sense of touch.

At first, however, orators and poets of genius are apt to evince rather extravagance or faintness, under stress of poverty, as regards the resources of language; and thus with a given stock of the latter, the halt and the lame often succeed where the otherwise vigorous and athletic fail. The man who is not overwhelmed by the immensity of his ideas or his emotions can afford to wait for the proper term with which to describe them. He need not fear that, while he is seeking how to attire them in language, others may possess and usurp their hold upon his attention.

On the contrary, ideas and emotions which are grand or multitudinous, where they cannot find a vent for escape through the portals of language, are too apt to trip up their owners altogether under that confusion of thought which is the legitimate offspring of confusion of terms.

That currency and abundance in the coin of language so necessary for the evolution of poetry and oratory is not required of the metaphysician, or of all those in whose writings, be they historians, biographers, or what not, abstract and philosophic views of life prevail over that which is concrete and ornate.

The metaphysician has, in proportion to his strength, a happy opportunity of waiting for the full development of his ideas before he clothes them in language; for, regarding but few objects comparatively at the moment, he can safely arrest the vehicle of thought. Without this power of arrestation language could not be held in suspense; as it is, he coolly waits till he has found the right word for his purpose.

The ideas of the poet and the orator are often as quick and transient as the "Gay motes which people the sunbeam—as rich bedecked as the woof of Iris." But the results of the philosopher, slow indeed in their incubation, are not evanescent, and, like the cub of an elephant, they are long-lived also.

The case of the poet and the orator may be likened to that of an army which, if it is to move quickly, must have large attendant resources of baggage, animals, and vehicles. Unless, either naturally or artificially, the poet and the orator possess a large fund of language, they are likely to be starved and paralysed by the way.

Thus both the poet and orator, with a view of insuring that rapid transit of the associations which are usually required to stir up their own emotions, are obliged to throw away correctness of phraseology as an encumbrance, or, retaining the latter advantage, to make a sacrifice of the former principle.

Such sacrifices are much more rarely required of the philosopher. The comparative paucity of the ideas excited at any one

time by his studies, and their separate clearness and vividness, are such as to insure their depth and permanence; and these qualities confer upon him an immunity from anxiety lest his ideas should glide away from the disc of thought before they have been photographed in language.

For myself I believe that no clear and definite idea need ever be lost to the world for the want of a due vehicle of expression; provided only that, whenever his resources of terminology fail the thinker, he will deign to express his meaning by a definition.

The essence of the idea conveyed by this definition the speaker may gather up into a new term if required. Thus, a man who has lost his hat may throw his cloak over his head. This cloak (answering to the definition) may suggest some covering more suited to the climate than even his hat. New terms are thus the expression of new wants, or sometimes of old wants, for which the acquired resources of language are to the particular thinker unavailable.

It would appear, therefore, that the language required by philosophy consists of terms of art, and definitive expressions, rather than of the common words which are so valuable in illustration. These latter words form a capital without some power of drawing upon which no poet or orator can start.

In the case of the philosopher there are certain words which are the keystone of the solid bridge with which he connects distant provinces of thought. The airy structures of oratory and poetry require, indeed, more various and flexible materials. But none are of such weight, or require such accuracy of line, measurement, and equipoise as those which, few in number, are yet indispensable to the philosopher.

Now it is clear that the emotive region in which, more or less, all poets and orators move must be sustained at a certain degree of tension; that is, if their own sympathies and, by contagion, those of their audience are to be duly excited.

In the degree, then, in which this tension is continuous and can be reckoned on, so long does it form a sort of atmosphere exercising a constant pressure upon their intellectual energies; and thus, whatever terms they use, their ideas, by the pressure of emotive associations, are constantly moulded into a proper shape and cohesion; and in this way they harmoniously blend.

In philosophy, however, there is no extrinsic force thus binding up the parts of a whole. Here the cohesion of the ideas must depend on their proper affinities; and these affinities will not tell unless language, which is the exterior covering of the ideas, act as a conductor to such affinities; just as in chemistry bodies possessing the strongest tendency to combination may be kept at a distance by a non-conducting medium.

On these general principles it is that, while wealth of language is peculiarly the food of the poet and the orator, appropriateness of language is the very life-blood of the philosopher, and each term in a definition which he uses is a counter, which ought to denote a given quantity and quality of meaning.

As regards the capital of language with which he is required to commence, the philosopher clearly has this advantage over the poet and the orator,—that, whereas the two latter require the abundant use of concrete terms, to separate which into their elements would deprive their conceptions of all their life, force, relief and symmetry, the philosopher can dispense with them. For the demands of the latter are satisfied, if he can instil into the reader a clear comprehension of his meaning by a definition itself consisting of a multitude of words; and this is a sort of set-off against his need of a large store of words of art.

On the contrary, were an artist to endeavour to resolve his compound ideas into their elements, the central fire of inspiration which united them would become evanescent,—and that which he sought to adorn would seem a multitude of dead atoms and not a glorious compound bound together by a tie which should not be unloosed,—with the philosopher things are different. However deficient in elegance a definition may be, the philosopher, being careless of the emotive sympathies if he can secure the intellect of his reader, can achieve his end by clearness of language alone.

This, then, is my conclusion, that, subject to the necessity of using in philosophy correct terms of art, a man of high capacity may often achieve large results by the application of but a small vocabulary; that is, if he possesses a delicate discrimination of shades of meaning, and a thorough determination, in the use of terms, not to allow the meaning of one term to overlap the other. And though in this respect he may be in some degree at the mercy of the delinquents of former ages, who have stamped such errors with currency, he may neutralize their ill results with proper provisos and exceptions, and where necessary by new terms.

It must, however, be remembered, that the fusion into the popular mind, and the verification thereby of the speculation of great thinkers, demand a copious vocabulary. For upon the uneducated terms of art fall with an oppressive weight; at the same time their own experiences are denoted by language which pure abstract thinkers regard as familiar and vulgar; and thus great thinkers often enter the market to purchase popularity with their thousand-pound bank-notes, while the common traffickers know no currency except in pence and silver. Hence, then, to be popular, the greatest thinkers must ever take account of the lowest currency by which the thoughts of men are represented; otherwise

they run the risk of starving in the midst of fancied wealth, for the want of a medium of exchange.

Yet to a weak mind, indeed, dealing with a vast subject this wealth of words may prove a source of confusion. Just as one of the Argonauts would find himself more at home in navigating a Chinese junk than a full-rigged man-of-war, or the "Great Eastern." Yet a man of inferior calibre, when confining himself more prudently to the examination of single questions, may derive an insight into his subject by a knowledge of all the terms with which it has been canvassed. An ancient Argonaut would navigate a pinnace more easily than the "Great Eastern." But if patient of instruction, he would learn more from the structure of the "Great Eastern" than from that of the pinnace.

Dr. Roget, in the masterly introduction to the invaluable work, "Thesaurus of English Words and Phrases," has shown us how great is the suggestiveness of a large vocabulary by the mere juxtaposition of words of various shades and various meanings, and even how a mere catalogue of names may often suggest relations and interdependencies between ideas; and often to that central idea round which they latently revolve.

Wealth of language, then, like all other wealth rightly wielded, rightly distributed can never do harm; only let each man take a gauge of his own capacity. In so doing he will not attempt to grasp at a larger mass of ideas (of which words are the counters) than his faculties warrant. So will he be able to carry his burden with ease, without confusion, and without losing integral portions of it.

To minds such as Plato's, Bacon's, or Shakspeare's, language must ever halt behind the majestic tread of their genius. Such indeed was the affluence of Shakspeare's thoughts, that, in order to give a vent to them, he had to ransack the English language to its extremest verge, rejoicing in those sharply cut vernacular terms and idioms upon which the stamp of the great Anglo-Saxon intellect is so clearly impressed; in expressions which, though the prejudices of such men as even Johnson and Voltaire have branded them as vulgar, are alive with the fire of nature, and which under the hand of such a master are landmarks by which we may estimate the almost boundless extent of the incomparable experience of the human mind. Just as the force of the Atlantic is more conspicuous as its waves rush into the deep recesses of the shore-hid inlets on the Cornish coast, than when the expanse of the ocean itself is gazed upon. With Shakspeare language is both the sheath in which the sword of thought is hid and the hilt with which it is grasped. Both hilt and scabbard are mean compared with the weapon which they subserve.

For no capital, no stock of that current coin of language, which more than serves the wants of common men could suffice the needs of Shakspeare's traffic with the commodities of thought. A mind so vast had to institute a system of credits and exchanges of less tangible material to supply its daring purposes. Such was the pressure of his thoughts upon his language, that they seem to exercise upon it a sort of domination: testified by the homage paid by mankind to the new force and virtues impressed on ancient idioms and words.

So vigorous was this silent compression of language to his will, that mankind gives an intuitive assent to his innovations. Here is the triumph of thought over language, of the soul over its embodiment; here is the outbreak of nature overcoming convention. Language, in fine, may stint the greatest minds by its deficiency, yet it cannot oppress them by its redundancy; while to those of humbler lot, rightly used, it is the fruitful mother of its offspring—Thought.

ART. IV.—ON A PARTICULAR CLASS OF DREAMS INDUCED BY FOOD.

*"And Phan'sie, I tell you, has dreams that have wings,
And dreams that have honey, and dreams that have stings,
Dreams of the maker, and dreams of the teller,
Dreams of the kitchen, and dreams of the cellar."—BEN. JONSON.*

In two previous Essays "On Certain Physiological and Psychological Phenomena of Dreams" in this Journal, we endeavoured to establish the opinions that these different "visions of the night" were induced by certain conditions of the brain; by partial states of vigilance of the external senses; by the agency of certain physical influences, such as heat, cold, light, and so forth; by pressure on the heart and the other organs of circulation; and by particular conditions of the muscular system.

We now propose to investigate several interesting phenomena arising from the effects of different kinds of food, particularly when taken for supper, in order to show that special trains of thought are induced by what is taken at this unwholesome meal. The investigation will have a psychological bearing, by showing that all deranging influences or disturbing tendencies affect the brain. Yet the combination and accretion of new ideas which are thus engendered, and the extraordinary powers which the mind seems to possess under such circumstances over time and space, furnish matter for profound reflection on the independence of the soul when it induces the complexities of any special vision;

which phenomena furnish presumptive proof of the soul's actual existence, and that it will still exist when the mortal coil is thrown off altogether.

Instead, therefore, of urging, as some have done, that, if so many extraneous influences may be the cause of dreaming, by inducing trains of thought which for the time occupy the dreamer's consciousness, that these phenomena lead to the inevitable corollary of the materiality of mind, and also to the conclusion that these trains of ideas are merely acts of cerebration, such inferences seem to us not only gratuitous, but also highly unphilosophical. All that these phenomena actually show is this, that everything which affects the circulation of the blood, or which increases or diminishes the *vis nervosa*, may, and does interfere, modify, or stimulate the action of the mental faculties; so far as any material agent can affect the condition of the organs of the mind, by exalting or diminishing their respective functions.

The effects on the cerebral organization are precisely similar to other organic conditions; as, for instance, when the eye-balls suffer from any inflammatory action, vision for the time will be defective. And we might state as a physiological proposition, when speaking of this condition, that, although the soul is temporarily deprived of the use of the optical instruments for communicating with the outer world, yet this deprivation does not interfere with its absolute convictions that all surrounding objects continue to possess proportion, consistency, form and colour, even though it cannot recognise them.

We may therefore assume that if, when dreaming, we have the power of painting scenes marvellously striking or exquisitely beautiful, these cannot be regarded as induced by organic impressions, but by the inherent power of the soul, which dimly perceives its own vast capacity and sublime destiny. And, although the immortal mind may seemingly be affected by a fever, or disturbed by a debauch, inducing particular dreaming tendencies, yet the very visions are so different from matter-of-fact occurrences, that, instead of furnishing arguments damaging the sublime and independent functions of the soul, it seems to us to render this independence rather more a matter of certainty than as being anything of a speculative character.

In a word, we regard the fact as established, that dreams merely indicate certain disturbed conditions of the organic instruments of the mental faculties, through which the soul manifests its power and capacity; and by which it is capable of taking cognizance of the outer world; but even under such conditions it can excogitate, and create new and unknown states, and therefore it furnishes the strongest evidence that it has an independent existence.

After these preliminary remarks, we will submit some curious dreams, to show that particular kinds of food may have a special tendency to suggest the rude material of the nocturnal vision.

The first time we entertained this view of the subject was in consequence of the following incident:—

A gentleman who was not in the habit of eating supper was induced to partake of some richly-stewed halibut, as that fish was a favourite kind with him. On his return to his house he read for two hours a very interesting essay, so that it was past one o'clock before he retired to rest. "To rest the body (as he said), but not the mind." For, although he fell into a sort of slumber, his busy thoughts were occupied by the subject of man's abstract rights and political wrongs. After this almost waking-dream, for it referred to his previous reading, his tired faculties became more intensely clouded, and soon the busy world, with all its follies and its crimes, its wisdom and its errors, became oblivious to him. After a time he had a dream, most painful yet most curious. He was walking with a niece (a young girl about twelve years old) by the seaside, on a most picturesque coast, and finding himself greatly fatigued, he determined to rest himself on a ledge of the granitic cliff. The place he chose, from its abrupt slanting sides, was like the roof of an ancient house. He remembered that he selected the slope nearest the land-side, but from some cause which did not appear in the statement, he ventured to crawl over the crest of the ledge, and to his horror found himself sliding downwards to the rough and boisterous sea, which was at the time lashing the base of the cliff in a most savage manner. His sensations were indeed agonizing. Cold and clammy perspiration enveloped his whole body, as if he had been clothed in wet garments, yet he made an effort to save himself. He called to the little girl to climb to the summit of the ledge immediately, and let him take her hand. She did so with great promptitude, as if conscious of his imminent danger. He could not recollect how long he seemed to hang in his perilous situation, suspended between life and death by a frail thread; but he distinctly remembered that he reasoned on the improbability that he could hold on much longer, and that as he grasped his little relative spasmodically, he dreaded that he might also drag her to instantaneous destruction. However, nerved by his terrible predicament, he determined just at the crisis when his painful conjectures would probably be realized, that he would make one desperate effort to save the child and himself;—he did so and succeeded, yet when he got on the safe side of the ridge he fainted. The latter sensation was merely the transition from the dreamy to the waking state; if the painful condition he was in could be called so, as he continued under the influence of his ideal terror. His body was very feverish, and his heart was so much disturbed as to induce a sensation of sickness.

The heated state of the skin was evidently the result of the rich fish he had eaten (as fish by night has more or less a feverish tendency), but that the food should have been suggestive of the scenery, as indicated by the incidents of the dream, leads to a very curious subject of inquiry for the psychological student.

Sir Charles Bell said, on one occasion, "that there are no accidents in nature." This truth may be applied to the investigation of nocturnal visions as well as to physical phenomena. For whether the active soul experiences pleasurable or painful emotions, these emotions depend partly on real causes, and cannot be considered as either adventitious or arbitrary. This opinion we hope to confirm in the evidence about to be submitted. Two preliminary considerations present themselves in our investigation, namely, that not only shall we find that the kind of food may determine the events of a dream, but often also that the pursuits of the dreamer will tend to give his dreams some speciality.

For example, we knew a medical man who after attending a lecture was very hungry, and, contrary to his usual practice, ate a hearty supper of rich fish with a stuffing composed of liver mixed with savoury herbs and spices, and some stimulating sauce. When he went to bed he had a rather dry and feverish skin, but he soon fell asleep and dreamt the following curious adventure:—

He said, "that he thought he was travelling in a very hot country, which abounded with a number of poisonous serpents, particularly the 'cobra capella,' and that having the opportunity, he determined to dissect some of them, and that he seemingly did so with impunity, until he proposed demonstrating the structure of the secretory glands which generated the poison. These he traced to the lower surface of the tongue, and when in the act of carefully pressing these glands to ascertain the colour of the deadly fluid, a little of it spirted into his face and caused him great pain. The sense of his dangerous position awoke him, and he was highly gratified to find merely a little eruption on his nose and face, evidently induced by the rich food of which he had partaken the previous night." And he added, that indigestion was invariably relieved, in his own case, by eruptions on the skin.

We select another instance to prove that particular food not only gives the speciality of the dream, but also in this case revived impressions of the past, and gave them all the vividness of reality.

"The other night I was very hungry and was induced to eat supper, and added to the outrage of partaking of cold roast beef, the folly of eating about a dozen pickled onions! But as I felt very comfortable and had a long way to walk, there was not any misgiving that for so doing any great punishment would result.

"By the time I reached home it was at least two if not three hours after taking the unwholesome meal, and soon afterwards I went to bed. I felt somewhat uneasy, but it was not very long before I fell asleep. Soon afterwards I dreamt that for some offence of etiquette I was doomed to eat '*sour-croust*.' Now it so happened that this sort of pickled cabbage always caused me most painful nausea even when smelling it, so

that I had never been prevailed on to taste it. Nevertheless, in the vision, it seemed that great pains and penalties awaited me unless I abided by the unchangeable fiat of the judges.

"I fancied myself brought into a large room, in the centre of which was the reeking *crout*, and what with its acid fumes and its fatty smell,* I was almost overpowered, and I experienced a sense of gastric resistance. Still I made the effort to eat, but every mouthful which I endeavoured to swallow was immediately rejected, and the painful and sickening sensation increased at every attempt to retain the abominable stuff. My situation was indeed pitiable; and the perspiration trickled down me from the agony I experienced. It was a battle between *sour-crout* and the stomach, and the struggle was desperate, but the stomach conquered, and I awoke.

"My mouth was filled with acidity and the disagreeable taste of the onions, which conjointly rendered my sensations most unpleasant. This condition of the mouth had evidently suggested the dream, and an early antipathy for fermented sour cabbage was reproduced with as much vividness as if the *crout* had been positively served up, and coercion had been used to enforce its being eaten."

This individual was advanced in life, and had not seen or smelt the *sour-crout* since his boyhood, yet its odour appeared as disagreeable to him in his dream, as it would have been in his wakeful period.

We will now relate another amusing dream, suggested by the nerves of taste, which occurred to a lady, a friend of the writer, and which furnishes some speculative thoughts to the psychologist.

It is not often that we specify the age in these cases, but it may be incidentally noticed that the dreamer was about fifty-seven, with a *nervo-bilious* temperament, and of the most simple habits, never indulging in any kind of alcoholic beverage, although she was not pledged to abstain from them.

Mrs. — had a slight cough, and one of her interesting daughters brought her some barley-sugar to suck when in the act of lying down, or in case the cough disturbed her during the night. She had, on the occasion we are about to relate, taken a piece of this *sweet* "medicine" into her mouth, and soon afterwards fell asleep, with the confection undissolved.

She dreamt that she was a very little girl, and that she was spending the evening in a juvenile party, at which, besides tarts and jellies, there was added an abundance of sweetmeats of the most delicious kinds. She felt superlatively happy, and what contributed to ensure this satisfactory state, all her early associates were present. These friends of her childhood appeared the same laughing girls and boys, and were apparently undisturbed by care or annoyance of any kind. Yet she seemed to have some under-current of misgiving, for many of these *spectra* had been dead for years, and others she had not seen since

* In Germany *sour-crout* is usually stewed with fat beef; hence his dreamy reminiscences were the impressions of his childhood.

their school-days, when she herself was but a little girl. But these reflections did not affect her, for she fancied herself entering into all kinds of childish sports and pastimes with all the glee imaginable, and so she continued to laugh with those around her until she awoke with a smile on her features; and so brief was the whole period of the dream that her daughter (who had been talking to her) had not left the bedside, for she had not been asleep more than a few minutes.

When Mrs. — related this vision to us, she said, "With my restoration to perfect consciousness I could but wonder how any such illusion would so engross the mind, and appear so very, very vivid and real." But the explanation as to the predisposing cause was simple, for when she awoke she was still sucking the barley-sugar. And there is every probability that as she was going to sleep the passing idea occurred, "I am like a little child to go to bed with sweetmeats." This suggested to her mind the train of pleasing thoughts. For when the world was closed on her unconscious senses, her soul thus untrammelled revived the scenes of her juvenile days, and called forth from the shadowy past her former associates, companions who had been forgotten during her more matured age with its hopes and fears. Anyhow we regard this dream as revealing one of those beautiful facts indicative of the soul's independent functions—that there are times when there is an obliviousness of all mundane trials, and the mind is imbued with sentiments of purity and innocence, and yet it experiences the most exquisite emotions, and however brief the time, it is enabled to feel perfect happiness!

We have had related to us many other similar kinds of dreams which corroborate this passing speculation. But instead of reporting them, we will submit another species of dream from its psychological interest. We select one instance, in order to show that the mind during sleep seems under some circumstances to confirm a conjecture which during the hours of wakefulness may be only surmised as a mere transient reflection. A friend of ours, a man with an active temperament and a sensitive brain, was devoted to modelling and sculpture as a pursuit, and to literature and science as relaxations, and to his other qualifications he was said to be a most skilful physiognomist. But he rarely ventured to act on his knowledge of character from mere facial indications, lest he might inadvertently commit an injustice. To use his own words, "though he had faith in the science, yet he was conscious how much man was the creature of education, so that probably the most degraded might, by a train of propitious circumstances, not be what he seemed to be," therefore, however meanly he thought of any one, he never refused to do him a service.

These particulars are essential to appreciate a dream he had, which we shall relate in his own words.

"It was the latter end of June, 18—, when the atmosphere seemed saturated with electricity, and day after day there was heavy rain with thunder and lightning, and yet so great was my sense of fatigue that I determined to take a stroll to refresh myself, having been mentally hard at work for many hours. During my walk I called on some of my wealthy relatives, and was urged by them to stop to take some tea, which I declined, and returned home about nine o'clock. After enjoying my meerschaum until eleven, I was induced to partake of a slight fish supper. It was some time after 'the witching hour' that I went to my bed-room, but not to sleep, for with my pipe I sat watching the beautiful coruscations of electric fluid for an hour or two, until 'tired nature' inclined me to rest, and I was soon in a sound sleep.

"Early in the morning when I awoke, my mind was impressed with a most vivid dream, so vivid, indeed, were all the incidents, that it must have occurred just before awakening from a rather more than usual long slumber.

"My dream is indeed a curious lesson. Its philosophy I'll leave for the reflection of some profound student of mental science. Methought that I called at the house of Mr. Sneak, and that he showed me an order for some bronze figures, and I suggested to him a few ideas on the way in which they should be grouped, when he shook me by the hand, saying, 'Thank you, my dear sir; you are indeed a capital fellow, your hints are admirable,' &c.*

"I proposed a walk, and Sneak consented to go with me, and as the night seemed gloomy he took the precaution to take a mackintosh and a small umbrella, with neither of which had I provided myself, and as it soon began to rain I proposed to go into a tavern for shelter. He refused at first, and I said, 'Then I'll bid you good night, otherwise I shall be drenched to the skin;' so then Sneak accompanied me. We entered the part of the hotel dedicated to the family. And as they were at tea, we were asked to join them. Everything looked so clean and bright, even to the copper tea-kettle boiling at the side of the fire, that we accepted the invitation. Sneak, to show his affability, went unsolicited to bring the boiling kettle to the lady who acted as the presiding genius, but he soon dropped it, as the handle was very hot. Though he had caused much discomfort by the accident, yet with great politeness he was asked if he had hurt himself: he did not answer, but looked at his hand, coloured up, and then became very moody when he took a seat. I sympathized with him and proposed a dredging-box to flour it, which he declined in a rather pettish manner. He, however, ate some buttered toast and drank some tea, and then again looked very sorrowful at his hand and cried!

"I offered to procure him, when the storm ceased, some cotton-wool, but he actually refused my services, saying he would go and get some and return very shortly; but an hour had passed and Sneak was still absent.

* The narrator told us, in parenthesis, that Mr. Sneak had often betrayed his insincerity; and that he was literally "all things to all men," and had, besides, the bad habit of "throwing the hatchet,"—*anytime*, "lying."

"I paid the score and went to see an eminent artist on whom I had promised to call. The servant said he was engaged. 'Tell him a gentleman wishes to say a few words to him, and that he will not detain him but a few minutes.' She did so, and he came, flushed and somewhat confused, to speak to me. Mistaking his manner for chagrin that my visit had been so late, the cause for which I briefly explained, when he said in his frank manner, 'Why, my companion is Mr. Sneak, and he has just been abusing you, declaring that he'll cut you in future; that you are a nincompoop, and that through you his accident occurred.' 'Why, surely you are joking with me; Sneak cannot have dared to have misrepresented things in such a manner.' 'But he's the very double-faced fellow to do this!' 'Well,' said I, 'you like a touch of nature, and if you please we will unmask him; I will go away, and soon return, so bid your servant show me into your room unannounced. Then you will see how he will fawn and cringe.' As arranged, I walked into the room *sans cérémonie*, and Sneak coloured up, then turned deadly pale. His hand was in a sling, formed of a silk handkerchief. He then apologized for his rudeness in leaving me; but he continued, 'You are such a noble fellow and so forgiving that I am certain of finding a lenient judge,' &c. My rough artistic friend turned to him in a rather sharp manner, and tauntingly asked, 'Do you, Master Sneak, say these fine things to the nincompoop?—to the bore you intend to cut?'

"Poor Sneak was chopfallen, and particularly so when Mr. — said, pointing to the door, 'You had better go, Mr. Sneak, and not wait to be kicked out;' and was in the act of suiting 'the action to the words,' when this vain fellow rushed from the room, bellowing like a town-bull, and this last incident awoke me.

"What a 'yarn' the brain had spun, simply from refusing the tea, the weather's inclemency, and from having heard that Sneak was rejected from the 'People's College.'"

But there is a moral even in a dream, for our informant added, "That Sneak is just such a sort of personage, that he invariably spoke against his acquaintances behind their backs, and was affable even to servility when they were present."

We remark further, that this dream has certain psychological aspects. 1. That it is evident that the dreamer had previously suspected the sincerity of Mr. Sneak. 2. That in his sleep a scene is produced calculated to expose this defectiveness of his character. 3. That the brain not only exhibited its dual function by the presence of the "artist" and "Sneak" at the same time, but the *egoism* of the dreamer (which also takes part in the mental drama) gives the cue to the other *dramatis personæ*, and thus positively brings out in fine relief the respective peculiarities of each.

It is not essential that at all times we should partake of a particular kind of food to induce the dreamy process; this induce-

ment may also result from a disagreeable or pleasant taste,* which, being perceived by the partially awakened consciousness, may tend to excite certain trains of thought which are either naturally associated with, or which are suggestive of others, the proximate cause being positively disconnected. We select the following example because it possesses certain psychological peculiarities:—

"A medical gentleman, who was in the 'sere and yellow leaf' of life's seasons, had partaken of supper, in which eggs in some part formed a portion of the repast. He also took a glass of bottled stout, an excess he was guilty of not more than thrice a year. Yet he says that he felt well when he retired to bed, although his skin was somewhat feverish and his mouth rather dry. The latter he attributed to having smoked a cigar. He relates that he was not long before he fell into a profound sleep, but some time before he awoke he dreamed that he was an usher in a school, the proprietor of which almost starved his scholars, and put him and the other functionaries on 'short commons.' This dream-created 'Squeeters' gave them all what he called 'a late tea,' but not any supper, and he said he did so because the last mentioned meal was like taking with premeditation a deadly poison into the system. Sometimes, however, he relaxed in favour of his assistants, from a conviction that they were acquainted with his own excessive indulgence in 'creature comforts' in the form of supper, and he professed that this meal was *qualified* in its poisonous tendency by a few glasses of stiff grog; and he whispered his 'better half' that he must make an occasional exception to prevent a mutiny.

"The dreamer thought on this occasion the proprietor had invited the classical tutor and himself to partake 'the unwholesome meal,' which consisted of boiled eggs, but which eggs were scarcely warmed in the water; and as the night was cold and the room cheerless, he (the dreamer) made up his mind to preserve his own eggs and have them better done, even though it would be so much later before he could eat them. He therefore managed to conceal them in his hat, placing over them his pocket-handkerchief, and being pleased with his success, he finished his comfortless meal.

"It seemed, however, that the 'master' had observed the trick and determined to thwart it, so he asked the dreamer to go to his study for a book, and during his absence crushed the half-cooked eggs, without disturbing the temporary covering. Our dreamer returned and took his hat, and as he went into the street put it on, when to his horror and annoyance the glairy fluid streamed over his hair, eyebrows, eyelids, and almost blinded him. This would have been to him sufficient annoyance, but he fell in a rage when he heard the coarse, vulgar voices of the 'master' and his selfish brood laughing at his mishap, and insultingly shouting 'serve the humbug right,' 'Take care of your eggs,' 'take care of *the* eggs,' and then another and

* As in the case of the "sour-croût" and "barley-sugar."

another peal of laughter, until his indignation was roused to frenzy, and in the act of denouncing their worthless natures he awoke."

To our query he replied, "that he recollected distinctly that he had a most unpleasant taste in his mouth, like rotten eggs (probably induced by the beer and cigar, which had rendered him bilious), and that for the whole adventure of his vision he could only account by recollecting a similar incident which had occurred to an acquaintance of his when they were boys together, but that he had entirely forgotten the circumstance until its reminiscence was renewed in his dream, but that the talismanic influence of Memory had omitted the actual hero, and fixed the whole adventure on himself. This latter consequence he attributed correctly to the state of his mouth.

This proves that, however absurd or irrational, or actually untrue a dream may be, that it is still governed by what has been termed "the association of ideas." For in this instance we may mention that that part of his sleeping adventure, "when he was in a cold, cheerless room," was occasioned by his feet being out of bed, the window being accidentally left open, admitting a strong current of wind, which lowered the temperature of his whole body, so that even in his sleep he must have actually shivered.

Sometimes we may trace the connecting links from which the events of a dream may have been fabricated; and on other occasions we may find a strong admixture of truth and romance, so blended as to leave the mind unsatisfied with any attempted solution to the mental riddle. The following dream, related to us by Mr. Y——, will illustrate our meaning. He says that he attributed his dream to having taken a cup of tea, a beverage he had abstained from for some years, as it invariably produced a painful action of the heart, and sensibly accelerated the circulation of the blood; we will give his own words:—

"On —— I paid a visit to a literary friend, accompanied by two of my daughters, and as usual we spent a most delightful evening. Our host was a man of versatile genius, being a linguist, artist, mechanist, and highly musical. When the members of the family took tea my daughters joined them, but they were greatly annoyed at my declining to do so, and after repeated urging I consented to take one cup of that 'which exhilarates without intoxicating,' and its visible effect almost immediately after was manifested in an extraordinary flow of animal spirits, and a copiousness of expression almost like inspiration.

"In the course of the evening our host played the *piano-forte*, and he was followed by one of my children, who was praised for her execution and brilliant touch. And whilst this concert was going on, I walked into another room to converse with the amiable and intelligent lady, and whilst doing so we heard the sonorous and rich voice of her hus-

band chanting sacred music. These floating sounds suspended our conversation, and when we resumed it, I distinctly remember saying 'that our friend's varied talent and fine intelligent face would have made him a dangerous priest to confess susceptible girls,' at which my companion said, laughingly, 'So I think!'

"We returned home about twelve, and went to bed, but the tea prevented my sleeping, and besides, my mind was more than ordinarily vigilant from the different sources of excitement to which I had been exposed. After tossing about an hour or two in no very pleasant mood, I fell into an uncomfortable slumber, and dreamt that a fine, portly, good-looking priest visited us, and that from his manner to my wife he aroused my anger and jealousy. I denounced him as a sensualist, unworthy of his sacred profession, and mentally proposed, as an experiment to test the accuracy or error of my suspicion, that I would intimate my intention of being absent from home for some days; but at midnight I returned, and entered my house by a private door, the key of which was in my sole possession. Noiselessly I proceeded to my bed-room; it was locked; and as I turned in a moody spirit to consider the best way to act under the circumstances, I fancied I saw the figure of the priest glide towards the bed-room of one of my daughters. I followed, and beheld the villain in the act of moving the bed-clothes from the sleeping innocent being, and struck him with my bent fist, so that his whole person was covered with blood. He looked like a priest officiating at the *taurobolium*,* and regarding me with the expression of a demon, he raised a glittering dagger to plunge into me. It was the work of an instant. I sprang on one side, and then suddenly returned and gave him a desperate blow on the temple, and he fell flat on the floor, and the noise awoke my whole family, some of whom, and amongst them my wife, rushed from their beds to ascertain the cause.

"A few words of explanation induced my good partner to tell me that the wretched priest had attempted to seduce her, but on her threatening to expose him, he promised to leave the house, but she added, 'he had evidently concealed himself, and has met the punishment he merits.' We gave the alarm by springing a rattle and calling loudly for the police. Soon five or six made their appearance, and we gave the sanctified wretch into custody. As the officers were securing him he recovered his consciousness, and begged he might be spared the public disgrace, and urged that I should drive the dagger (which he still held spasmodically in his hand) into his heart rather than suffer his conduct to be exposed. In order to arouse in me a spirit of revenge, he confessed 'that when he found my wife invulnerable to

* "The TAUROBOLIUM of the ancients was a ceremony in which the High Priest of Cybele was consecrated, and might be called 'a baptism of blood.' In this dreadful and sanguinary rite, the high priest to be inaugurated was introduced into a dark excavated apartment, adorned in his vestments. Above this apartment was a floor perforated in a thousand places like a sieve, through which the blood of a sacred bull, slaughtered for the purpose, descended in copious streams on the enclosed priest, and in which bloody shower he bathed his hands, cheeks," &c.—Abridged from the Poet Prudentius, and cited at length by Banier "On the Ancient Sacrifices."

his sensual proposals, he determined to pollute my favourite child.' This did rouse my ire, and as I awoke I was screaming, '*Take him away!*'

"My heart was beating in a most painful manner, and big drops of perspiration bathed my forehead. And yet in all probability the whole dream did not occupy the time that it has taken to relate it."

We may remark that all this mental suffering was attributed to the tea, which had affected the nervous system, and fearfully increased the action of the heart, which he said felt painful for some days.

We believe that much information would be derived regarding physiological and psychological science, if men would note down any peculiar states and sensations induced by various disturbing influences; and hence we record the following as worthy of some reflection:—

"A gentleman was requested to write an article on 'gas' for a periodical, in which he was to treat of the subject. He therefore was occupied for some days with studying the chemical composition of gas, the best mode of purifying it, and the advantages and disadvantages of its use as considered with respect to bodily health.

"Having satisfied himself with his different experiments, he had decided on writing his article the following day, but prior to going to bed he had eaten some raw apples and bread, and drank merely cold water. He says, 'Although this was an abstemious meal, yet before retiring to rest I was somewhat annoyed with flatulency, which, although rendering me very uneasy, yet from being very tired this did not prevent me falling into an intense sleep. But I had a dream which so thoroughly roused me, that the 'sweet restorer' seemed banished from mine eyelids.

"It seemed to my busy thoughts that I had invited a number of scientific men, and introduced to them not only the various opinions entertained on the use of gas, but also submitted to these *savants* a series of experiments that I had tried, for what purpose my *egoism* did not note. The whole assembly regarded me with astonishment, for I caused to issue from my mouth, spontaneously, streams of colourless gas, which on being ignited, gave out not only a clear and brilliant light, without the slightest odour, but was so volatile that it spread out widely with a fan-shaped flame, which seemed to increase and render the atmosphere most lucid.

"One of the learned party exclaimed, 'This marvellous display is an instance of 'spontaneous combustion;' let us observe calmly the results, and endeavour to ascertain if the individual is entirely consumed; for in studying this phenomenon, what signifies sacrificing the life of an individual?' It is a curious fact that I did not seem alarmed, but only experienced some anxiety to know the nature and quality of the gas. I tried repeatedly to speak, but at each effort greater volumes of the luminous agent poured forth with greater

rapidity, and the light gradually grew stronger and stronger, and too vivid to look at.

"It amused me to see the learned jury remove from time to time farther away, merely remarking it would have been better if, instead of a man's mouth, it had issued from a half-burner.

"Every now and then my own efforts increased to ascertain something more definite by the smell. At length I jerked out *hy—, hy—, hy—*; but the word seemed to stick in my throat, although I felt assured it was hydrogen gas, and used painful and grotesque expressions in the endeavour to communicate the fact, and the whole party burst into a roar of laughter at my awkwardness. This ignorance on their part forced me to attempt a more concentrated effort to explain, and in this effort I awoke.

"And soon there seemed a solution, by the fact that I was oppressed with flatulency; and the impotent attempt I had made to expel the flatus had occasioned the latter portion of the dream, and the origin of the whole train of thought was evidently traceable to my mind being occupied for some days previously with the subject of gas, which was so curiously mixed with the whole adventure."

We would now remark, that there is presumptive evidence to indicate that, whatever may be considered the predisposing causes of different dreams, we may often discover, during these nocturnal vagaries, some predominant faculty at work in the mind of the dreamer, which faculty seems to give its reflex influence not only to the mind during sleep, but also to the thoughts, even in a state of perfect consciousness.

In the instance to be cited we shall find that the speciality of the dreams was induced by the particular food the dreamer had eaten, although the amusing sleeping adventure indicated a strong tendency to the grotesque and the ridiculous.

We were at an evening party at the house of one of our relations, when we were accosted by a comic-looking gentleman, a medical practitioner, whose expression was so naturally humorous, that he would have excited a smile even in a suffering patient. He said, "I am told you are an interpreter of dreams, and are acquainted with all the *arcana* of these curious phenomena. Will you explain one I had recently? We expressed a wish to hear it, and he continued thus:—

"Methought I was announced to lecture on some new kind of 'revalenta' food, which was cheaper than bread, and combined the rich flavour of meat and poultry. A vast mob had collected to hear me in the market-place—a most fitting spot to discuss the merit of different kinds of food. I had not made my toilet—but this did not annoy me, as my auditory were all *en deshabelle*; but I had omitted to bring the MS. of my discourse. So I made my apology, promised to be back within an half-hour, and then they should have my revelation to repletion. Three cheers encouraged me, and full of spirits I started on my errand.

"But somehow or other I could not again find the market-place, but continued wandering about until it was nearly dark. Everybody whom I asked merely stared or made faces at me; and when requested to tell me 'the way I *should* go,' replied with a coarse laugh, with the vulgar saying, 'Does your mother know you're out?'"

"At length a Turk, in his full costume, proffered his services, and led me to a rudely-constructed bridge, composed of long cylindrical bones, imbedded in some animal matter of a soft and unctuous kind. My guide suddenly withdrew his arm, and in pantomime bid me proceed. This was no easy matter; but I should have toiled on, if I had not suddenly been assailed by invisible fiends mockingly crying, 'Fish! fish!' 'How do you like fish, Doctor?' 'Stick to the fish; that's right, Doctor!'"

"These are but a sample of the taunts with which they pelted me, and made me feel worse than if I had been put in a pillory. My annoyance was greatly aggravated from being literally glued to my fishy path. Yet in the intense darkness it was impossible to say what was the actual substance. Fixed like a prisoner in the stocks, I had no other alternative than to bear the annoyance until the daylight should reveal my own position.

"When the sun burst forth from his eastern couch, my astonishment was indeed great, as the whole cementing medium which had so effectually attached me to itself proved to be decomposing salmon, arranged in layers over a vast many kinds of animal bones. Angry with my not *very* agreeable situation, I felt still more so to think such a beautiful fish should be used for such a purpose, and then I made a desperate effort to get away, and immediately awoke."

This dream was indeed both curious and amusing, so we commenced a rigid "cross-examination," and ascertained two probable suggestive sources for the kind of fish, and the outraged experience that it should be so wasted, contrary to all taste and gastronomic propriety.

The doctor had been reading a paragraph in the *Medical Times and Gazette* (June 20th, 1857) giving an account of a *conversazione* held at St. Bartholomew's Hospital, where, among other objects of interest, there were shown the *ova* of salmon preserved in gelatine, and some account of the artificial reproduction of this rich and royal fish from similar preserved specimens was given.

We also had the information that he had been unable to take his dinner, and he had therefore taken tea at the house of a friend and patient, a foreign gentleman, who ordered up some fine slices of fried salmon, and after satisfying his visitor on this solid fare, there came some rich smoked salmon; the latter, he said, was so very rich and fat, that it seemed to melt in the mouth, so that he said these rare luxuries tempted him to eat a heartier meal than was judicious.

"At all events," we said to the dreamer, "there is a clue to explain the notions of your 'lecturing on food,' and of the salmon

pathway. These were floating ideas which passively exercised an influence on your general thoughts. Nay, it is not improbable that, whilst eating the rich smoked salmon, with your witty tendency, that you might have had the whimsical notion 'that a material so very soft would be nice to walk on,' " &c.

When we had given this solution, the doctor said, quizzically, "Your explanation is very good, but whence arose the suggestive clue that a Turk should have offered to guide me through my difficulties, the rogue and hypocrite leaving me embedded in no very agreeable position."

The turbaned Turk was simply a stray thought, a sort of mental parenthesis, and originated in your annoyance at yourself for tickling your palate even to repletion; and when the first symptom of annoyance was experienced, it is not at all unlikely that you should say, "I am worse than a Turk," because he could not, with orthodox authority, "take a little wine for his stomach's sake," if you could. "But I did not," said the doctor; "I took a little brandy instead;" and he laughed in a very merry manner, and then said, with a more serious expression, "There are indeed moral lessons in dreams!"

We should not be disposed to give a mere collection of curious dreams, if it were not that they aid in furnishing data to explain, still more than has yet been done, the philosophy of many mental phenomena. Amidst many of the extraordinary anomalous and inconsistent adventures during the state of partial consciousness, there is something like a law which regulates them; and when there exists any special exciting cause, as food for example, if the dream does not actually develop its incidents in connexion with the viand which had determined the imperfect rest of the brain, yet it will often be found that the soul seems conscious of the source of the disturbing agent, and reproduces incidents and facts which in the perfect waking state had been forgotten.

We submit the following instance as an illustration of the view just intimated. A scientific friend writes thus:—

"After lecturing the other night at the Philosophical Society of —, I took, what to me is an unusual beverage, a cup of strong coffee. It rendered me excited and indisposed for sleep. This was the more annoying as I was suffering much from chronic constipation. There was no remedy but patience, and I had to brood, or regret that my injudiciousness had brought the severe punishment of extreme wakefulness, with all its irritating consequences. However, after great restlessness for hours, sleep overpowered me; but in that sleep, alas! my mind was more energetic and morbidly active than in my waking state; and in its discursive vagaries I passed through many countries, consulted numerous physicians, climbed mountains, or tossed about on rough tumultuous oceans, evidently restless in this

pseudo-sleep to discover where I might find some mitigation of my feverish condition.

"After a variety of adventures and hair-breadth escapes, I arrived at the fashionable B——, for the purpose of consulting Mr. M——, a very old and skilful practitioner in that town. It may be remarked, incidentally, that he was in the habit of giving his patients some moral advice with his physic. In my case, however, instead of his usual courteous and affable manner, he abused me most soundly, and concluded with saying, 'You ought to suffer, if you are such a slave to grovelling appetites as to have no control over your actions.' After expressing my sorrow for this supposed delinquency, he answered in a most pettish manner, 'Fools are always doing that which brings them sorrow; and a learned fool is no exception.' This rude remark fired my temper, and I replied, 'How can I be assured that your opinion is so very profound?' when he aimed a blow at me with a pestle he had in his hand. And then I taunted him with his own wise saw, 'Fools are always doing that which brings them sorrow, and the disciple of Esculapius is no exception!' Scarcely had these words escaped me, than his son, wife, and footboy all assailed me; one with a scalpel, the other with a dissecting-saw, and the latter with a huge physic-bottle, and in the midst of the *mêlée* I awoke.

"Reflecting on what could have induced this amusing dream, I remembered that Mr. M—— once had recommended me to abstain from coffee, as he said that it was very bad for those who had constipated bowels. This opinion had been given some years past; so that with an imperfect consciousness that the coffee had been the disturbing cause, arose the reminiscence and the train of incidents it induced.

"It is not the least curious circumstance to mention that, although I had not seen Mr. M—— for some years, yet his individuality and quaintness were preserved most vividly in the dream."

We may mention in this place that, although a dream may be the result of particular food, still this may only give the direction to the adventures in the nocturnal vision, and yet the events themselves may be still traceable to the peculiar condition of the body from the nature of the food eaten.

An old gentleman related to us the following dream soon after it occurred:—

"One night we all supped at the house of a rich and worthy foreigner, who gave us most delicious fish, meat, pastry, and fruits. For myself I luxuriated on some fried salmon, though not to excess, and returned, home about eleven o'clock. The night was very beautiful, but never did I feel more comfortable. But when at my own residence, I experienced some slight feverish symptoms. My hands and body were hot and uncomfortable, and yet I had not drunk either wine or spirits. I retired to bed, and my feverish state increased greatly, for my active brain busied itself with all kinds of speculations.

"Tired and jaded, at last I fell into a heavy slumber, and was busy

at the sea-side with some of my children. We were walking on the beach, which was covered with dank sea-weed of many colours, and some rare and new species of flexible coral. We found it difficult to move, and with every effort to retrace our steps, we met with most annoying and uncomfortable resistance. In the midst of all these annoyances the clouds became black as ebon, and the wind whistled a dirgic melody, the sea ran mountains high, and a storm of a terrific character seemed gathering, and the spray and surge dashed over us with the unnatural clatter of so many brawling creditors. Our juveniles turned pale and cried, and yet, amidst all this 'war of elements' I seemed inclined to examine some of the specimens scattered around us. 'Pray let us go,' was said and repeated; still I heeded it not, but with a pocket lens was examining what seemed, from its arborescent form, a flexible coral, when to my surprise it proved to be *scales* of the salmon agglutinated together in a most graceful manner. The lightning became then most awful, running on the beach and the sea, which gave the latter the appearance whilst the glare lasted of a fiery ocean. Then I also desired to leave, and soon without any apparent volition we were safe in our apartments. After a time there was a slight lull, and out I sallied in my wet garments to collect the salmon-scale specimens, having lost those I first collected; but scarcely had I stopped to take some of them, when a huge wave rolled over me, filling my mouth and ears, and so stunned me that I awoke. My condition was anything but agreeable — skin burning; my mouth, instead of being filled with water, was dry and parched; and my temples throbbed in a painful and unpleasant manner."

This dream was induced by the "dainty dish" on which our friend had supped. And even in his sleep he had a presentiment that such was the case. Hence the notion of the seaside, the pleasure of examining the bright salmon-scales, and the state of the buccal cavity. That he should have supposed his enthusiasm would have rendered him calm in such danger, may be in some measure the fact, as his taste for natural history is a passion; but he certainly would never have permitted any of his own inclinations to expose those he loved to suffer from terror, or even any misgiving of safety, without making every personal effort to disabuse their minds. His whole mental state in the dream was similar to that manifested under the influence of fever. He jumbled together many incidents occurring at different times, and blended them so that in their connexion they furnished a rather curious adventure.

We select a few examples of the dreams which have occurred during after-dinner naps, for the sake of the curious composition and rapid progress of the events observed in them. Some of these dreams are of recent occurrence, and others are of older date.

The narrator of the first dream we propose to give had, a short time previous to its occurrence, been writing an article "On the

Treatment of Ticket-of-leave Men," in which he deprecated the folly of giving them their liberty without ensuring them employment; and he expressed his great indignation that the police tracked their paths, and thus prevented them from living by honest means, and in a measure forced them back again to a criminal career! This gentleman had eaten a hearty dinner and taken up a newspaper, when he read of some trick in reference to the sale of certain jewels, and with a very confused notion of the affair he fell into a profound slumber, in which the following dream occurred. He thought that he had called on some friends who congratulated him on his humane efforts, and they drank his "health," calling him "the servant of Mercy." And although he felt gratified, yet soon there appeared much hurry and bustle, as when coach passengers hurry from the table to regain their seats, and all seemed to have vanished. And then another incident excited his busy brain, and we will report it in his own words, literally, because of its peculiarity:—

"I thought I was living in the neighbourhood of a foreign court, situated in a very beautiful locality, and that in the town there resided a hard-working, clever jeweller, who was considered to be in difficult circumstances. But to the surprise of everybody he suddenly made a better appearance, and in consequence obtained some employment from the royal family. Yet people marvelled at this man's success, and speculated on its probable source. It happened (but how I have not any recollection) that I ascertained that he had found a very valuable diamond ornament, which his poverty tempted him to break up and sell the stones at some distant place, and in order to avoid detection he melted the gold with some he had by him. Whilst he was attending to the latter process his agitation was so great that he upset the crucible, so that its contents fell into the furnace, but he collected as much of it as possible, and afterwards discovered that he had lost four pennyweights of the precious metal. In the midst of this annoying circumstance two officers of justice arrested him, and he was taken before the king. His Majesty was a very jolly but imperious personage, and acted as the supreme judge. The prisoner was charged with the fraud, and the accuser said there was every proof of his guilt, for he had sold the diamonds. The poor jeweller looked at first rather more astonished than frightened, but soon he recovered a dogged manner and refused to answer any question. His royal judge lost all patience, and desired he might be put in 'the pillory.'

"This threat seemed to arouse the delinquent, for he answered in a somewhat angry and insolent tone, '*Pay me first for my four pennyweights of gold which I lost in melting the ornament!*'"

"What does the idiot mean?" said the judge. 'Pay me for the gold,' answered the disgraced jeweller.

"The king became excited, not with rage but laughter. 'The fellow's a fool,' shouted the judge. 'Ha! ha! ha! Don't you perceive, you dolt-head, that you confirm your guilt?' 'Will you (answered the

enraged criminal in a threatening manner) pay me for the gold? For the melting of your ornament?"

" 'Take the idiot away,' shouted the king, 'for he must be *mad* as well as foolish. Put him in a madhouse for life!'

"The whole scene amused me to think that a man who seemed so simple as this poor jeweller did, should have hit on such a clever finesse to get out of his scrape, and become well cared-for for the rest of his days.

"And his family were also saved, because of the sympathy which the court felt for the supposed malady of the delinquent. For myself it had a similar effect as a comic scene in some racy comedy, for I was tickled at the way he confounded the judge, and awoke laughing most heartily.

"As a curious instance of the activity of the soul, when the greater number of the bodily and mental faculties are oblivious of all sensible impressions, I may mention that the whole of this incident (which is much abridged in the narrative) had actually taken place in less than three minutes, for just before dozing I looked at a clock on the mantelpiece, and the whole was concocted without any apparent data for the incidents."

We have mentioned that this gentleman had written a paper "On Ticket-of-leave Men," but he had not that day been either speaking or thinking of these men; he remembered having enjoyed his dinner very much, and after he had said grace, he observed to some of his family, "I don't envy a king!" From this simple phrase, and from the fact that his mind had been pre-occupied with the problem how to improve criminals, we obtain a clue to the direction which his mind had taken in the course of his dream.

Another friend mentioned to us that from a simple remark made after dinner, prior to his falling asleep, a dream was induced which was in some degree a reminiscence of his boyish days:—

He said that he had eaten heartily of some roast mutton, with other things, for his dinner, and as this was his favourite animal-food, and being hungry, he had eaten with great gusto. One of his daughters declined any meat, as she had an antipathy to mutton, and our dreamer remarked, 'I am sorry you are not, like myself—a carnivorous animal!'

After the dessert he sat in an easy chair, with his feet on an ottoman, and fell into a sound sleep, in which he dreamt that he was partaking of a most delicious dinner all by himself, except that there was a large, shaggy, savage-looking dog under the table, who kept constantly rubbing himself against his legs, and in order to avoid this annoyance, he threw the animal many a precious morsel. But, instead of satisfying the canine intruder, this civility only made it more importunate. When, therefore, the waiter came, he complained; the dog growled in anger at the disrespectful manner it was spoken of, and gave evidence of the fact by seizing the trousers and giving the

dreamer a rather savage shake. He struggled to disengage himself, but he could not get rid of his disagreeable assailant, so he urged the waiter to remove him, and he awoke with a laugh, saying, "Well, it's a good thing he did not seize my flesh!"

We believe that the subject of a dream may or may not result from the disturbing influence of particular kinds of food; but the latter will oftentimes, either mediately or immediately, shape and fashion the ideas of the dreamer. For instance, there is something instructive in the dream just related, as the individual had been bitten by a dog when he was a little boy, which seized him by the leg and wounded the calf. So that for many years, to use his own words, 'his politeness to the canine species made him not only throw baits to bribe them into civility, but he carried his deference to such a fastidious degree, that he invariably walked on the opposite side of a street whenever he met a dog, so that he might not be incommoded by it.

Now, it should be remembered that he had exulted at dinner that he had a carnivorous propensity, and this *one* idea had continued to float in his brain, and became the nucleus, so to speak, around which was produced the reminiscence of his old enemy the dog. The dog which had wounded him in his boyhood was of the shepherd breed.

Here is another instance worthy of being recorded:—

A literary man, who was what is called, in ordinary parlance, "a good trencher-man," that is, one who invariably enjoyed his meals, one day had dined at home with his family, and being very hungry, he had dispatched slice after slice of some roast or boiled mutton, declaring that he had never eaten a more delicious, juicy, tender specimen of the far-famed Southdown sheep, and, as a proof of his sincerity, he refused all the *et-ceteras* of a wealthy citizen's dinner meal. After dinner he took his usual short *siesta*.

He had been but a short time asleep when he began to laugh, and that so merrily that it was contagious, and the risible chorus soon awoke him.

Immediately all asked him what he had dreamt about that had so tickled his fancy, and literally "set the table in a roar?" "Well," he replied, "I thought that I was at a public dining-table, not like our market ordinaries, for there were many strangers. The tables were well supplied with fish, meats, and vegetables of all kinds in season, and I myself only partook of mutton.

"But what tickled my fancy in the first instance was, that I overheard the waiters speak of the different visitors, giving each the name of 'the dainty dish' he or she had preferred. There were *Mr. Fish*, *Mrs. Steak*, *Miss Stew*, *Lady Cabbage*, *Mr. Rice*, *Miss Duck*, *Old Squire Bread* (the latter having repeatedly called for the 'staff of life'), and numerous others, distinguished by what they most enjoyed.

"I thought it curious that I had not been mentioned, and probably

I should not have been, had not one of the ladies asked my name. 'Oh,' said the domestic addressed, 'You mean Old Mutton.'

This audible reply was not considered rude, as he said he had simulated deafness when taking his seat, in order to avoid being annoyed by companions. He thus became the topic of conversation.

"'Old Mutton is a curious, eccentric personage,' observed a sly, funny squinting man of the law, who with a most bewitching lisp proposed 'Old Mutton's health,' and let him know our admiration is excited,' said the speaker, 'because he sticks so lovingly to his family connexions, and gives them the preference, as we all have witnessed.'

"All the company arose simultaneously, and turned towards me (whom they deemed oblivious), and then with mock gravity bowed, saying, 'Old Mutton's good health.' Whilst a few, not improved in their manners by what they had drunk, shouted out, 'Here's to jolly Old Mutton.'

"Then I opened my eyes and stared at them, and thus addressed the company: 'Thank ye, my innocent lambs, but you bleat most discordantly.' The surprise that was depicted on every face looked most ridiculous, and I continued, in a strain of badinage, 'Well, you pretty innocent wool-covered creatures, I am very glad you are not foxes, or else "Old Mutton," "Jolly Old Mutton," would have had little chance of saving himself from *your* chops!'

"The climax of their absurdity enhanced the fun, as they had actually thought that the waiter had told them my real name, so that the discordant chorus that followed was a second 'Babel confusion.' Take as an example, 'We didn't intend to offend Mr. Mutton.' 'We like mutton.' 'We don't intend to fleece you.' 'Mind your shoulders, Old Mutton.' 'Take care of your legs, Old Mutton:' and so forth.

"These specimens of small wit made the whole party merry, and I joined in the laugh at my own expense. But what rendered the merriment so boisterous, I was standing up, and on the opposite side of the table stood a thin, lantern-jawed, half-starved looking creature, with spindle shanks, on which he had mounted a scarecrow body, vociferating, 'Who cares for Old Fat Mutton?' to which with great gravity I replied, 'Why, surely, you, Mr. Sheepshanks, will not permit our family name to be dishonoured?' The silly fellow protested against our being relations with a most violent stammer and distorted features, and declared 'that he was no connexion of the Muttons, and never cared to be.'" His vehemence and ludicrous appearance called forth peals of laughter, and this awoke the dreamer. And after this account, which is greatly abridged, it may be mentioned that all had taken place during a doze of a few minutes.

Here is an example in which a dream occurring after a supper of tough beef-steak assumed a painful and distressing character:—

"One evening," writes the relater, "we called on a bachelor friend, who insisted that we should stop and take supper with him. The

servant brought up a beef-steak which was very hard and tough. This steak, we observed, would have been made tender by beating, which is a quick process of rendering the muscular fibre soft, acting with even greater certainty for this purpose than hanging the meat up for a few days. Our friend smiled, and merely remarked, 'Beating and hanging, then, are useful experiments, in their way?'

"We left him about twelve, and rode home; and it was not long afterwards that we retired to rest. But in less than a quarter of an hour we awoke from a dream, the heart palpitating and the whole body bathed in a cold and clammy perspiration.

"We had dreamt that we were still with our recent companion, and that he was speaking in a most friendly manner, when suddenly he turned round and cursed most vehemently, and then, in a most hurried and irritated way, told us 'to go and drown our carcase, as it was a quicker and less unseemly process than either hanging or cutting the throat.' He then laughed in a very maniacal manner, bent his fist at us in a threatening attitude, saying, 'Why the d——I did you give me the hint to hang myself? If I do it, you'll be hanged, and I'll come as a witness against you.' And then he yelled so frightfully that the dreadful spectacle awoke us.

"Reflecting on this vision of sleep, it occurred to us that, just before leaving, a passing idea floated in our brain, that, from the excitable nature of our friend, care must be taken that he does not go mad. This notion somehow mixed itself up with the conversation about the steak, and with his comment 'that beating and hanging,' &c., and thus was concocted a most painful dream. The proximate cause might have been that the arms were crossed, pressing on the chest, and greatly impeding the respiratory action."

In this essay we have treated of dreams which have been occasioned by food which has disagreed with the digestive organs, or which has exercised a peculiar effect upon the nervous system; of dreams which have been induced by food taken at an improper time, or which have happened when sleep has been indulged in immediately after taking food; and we have recorded certain instances in which not only the dream itself, but even the peculiar train of thought manifested in the dream was occasioned by the special article of food which had, by decoying the palate, disturbed both the stomach and the brain.

L.

**ART. V.—THE ASYLUMS OF ITALY, GERMANY,
AND FRANCE, &c.**

BY J. T. ARLIDGE, M.B., A.B. (LOND.)

NOTES ON SOME OF THE ASYLUMS IN FRANCE.

THE very excellent and interesting Notes, by Dr. Webster, on many of the public asylums of France, especially those of its northern half, have made the readers of the "Psychological Journal" acquainted with the system of treatment and management, and the principles of construction generally pursued in that country; there remain, however, several asylums in its southern and eastern parts hitherto undescribed, yet well worthy of examination and description.

The French law requires, as pointed out by Dr. Webster, in his first contribution to this Journal (Vol. III. 1850, p. 530), each department to provide an asylum for the reception and treatment of its insane paupers; or to arrange, under the sanction of the Minister of the Interior, with a public or private asylum in the same or a neighbouring department for their reception; or, in certain cases, to appropriate a separate division to them in civil hospitals, provided there be sufficient accommodation for not less than fifty patients. For further information on the French laws affecting asylums and their administration, we would, to avoid unnecessary repetition, refer the reader to Dr. Webster's Notes, particularly to the page above quoted, and to Vol. V. p. 376.

The departmental authorities have availed themselves, in providing for their insane poor, of each of the three modes just now cited. In several departments buildings specially constructed for the reception and treatment of the insane have of late years been constructed; in others, again, ancient religious houses and hospices for the poor have been converted to the purpose; whilst in others some portion of the general hospitals of their principal towns affords the only provision for their lunatics. Besides public departmental and strictly private asylums, there are others scattered through France belonging to religious orders, and under their direction—for instance, those at Lyons and Bourg, appertaining respectively to the Brethren of St. Jean de Dieu, and the Sisters of St. Charles.

Of the several plans for administering to the wants of the insane, that of placing them in the wards, or in a wing of a general hospital, is the worst. It inevitably entails all the evils of a bad site in the midst of a large town, a less pure air, a state of more or less complete imprisonment, enclosure by walls and

servant brought up a beef-steak which was very hard and tough. This steak, we observed, would have been made tender by beating, which is a quick process of rendering the muscular fibre soft, acting with even greater certainty for this purpose than hanging the meat up for a few days. Our friend smiled, and merely remarked, 'Beating and hanging, then, are useful experiments, in their way?'

"We left him about twelve, and rode home; and it was not long afterwards that we retired to rest. But in less than a quarter of an hour we awoke from a dream, the heart palpitating and the whole body bathed in a cold and clammy perspiration.

"We had dreamt that we were still with our recent companion, and that he was speaking in a most friendly manner, when suddenly he turned round and cursed most vehemently, and then, in a most hurried and irritated way, told us 'to go and drown our carcass, as it was a quicker and less unseemly process than either hanging or cutting the throat.' He then laughed in a very maniacal manner, bent his fist at us in a threatening attitude, saying, 'Why the d——l did you give me the hint to hang myself? If I do it, you'll be hanged, and I'll come as a witness against you.' And then he yelled so frightfully that the dreadful spectacle awoke us.

"Reflecting on this vision of sleep, it occurred to us that, just before leaving, a passing idea floated in our brain, that, from the excitable nature of our friend, care must be taken that he does not go mad. This notion somehow mixed itself up with the conversation about the steak, and with his comment 'that beating and hanging,' &c., and thus was concocted a most painful dream. The proximate cause might have been that the arms were crossed, pressing on the chest, and greatly impeding the respiratory action."

In this essay we have treated of dreams which have been occasioned by food which has disagreed with the digestive organs, or which has exercised a peculiar effect upon the nervous system; of dreams which have been induced by food taken at an improper time, or which have happened when sleep has been indulged in immediately after taking food; and we have recorded certain instances in which not only the dream itself, but even the peculiar train of thought manifested in the dream was occasioned by the special article of food which had, by decoying the palate, disturbed both the stomach and the brain.

L.

ART. V.—THE ASYLUMS OF ITALY, GERMANY,
AND FRANCE, &c.

BY J. T. ARLIDGE, M.B., A.B. (LOND.)

NOTES ON SOME OF THE ASYLUMS IN FRANCE.

THE very excellent and interesting Notes, by Dr. Webster, on many of the public asylums of France, especially those of its northern half, have made the readers of the "Psychological Journal" acquainted with the system of treatment and management, and the principles of construction generally pursued in that country; there remain, however, several asylums in its southern and eastern parts hitherto undescribed, yet well worthy of examination and description.

The French law requires, as pointed out by Dr. Webster, in his first contribution to this Journal (Vol. III. 1850, p. 530), each department to provide an asylum for the reception and treatment of its insane paupers; or to arrange, under the sanction of the Minister of the Interior, with a public or private asylum in the same or a neighbouring department for their reception; or, in certain cases, to appropriate a separate division to them in civil hospitals, provided there be sufficient accommodation for not less than fifty patients. For further information on the French laws affecting asylums and their administration, we would, to avoid unnecessary repetition, refer the reader to Dr. Webster's Notes, particularly to the page above quoted, and to Vol. V. p. 376.

The departmental authorities have availed themselves, in providing for their insane poor, of each of the three modes just now cited. In several departments buildings specially constructed for the reception and treatment of the insane have of late years been constructed; in others, again, ancient religious houses and hospices for the poor have been converted to the purpose; whilst in others some portion of the general hospitals of their principal towns affords the only provision for their lunatics. Besides public departmental and strictly private asylums, there are others scattered through France belonging to religious orders, and under their direction—for instance, those at Lyons and Bourg, appertaining respectively to the Brethren of St. Jean de Dieu, and the Sisters of St. Charles.

Of the several plans for administering to the wants of the insane, that of placing them in the wards, or in a wing of a general hospital, is the worst. It inevitably entails all the evils of a bad site in the midst of a large town, a less pure air, a state of more or less complete imprisonment, enclosure by walls and

buildings, the deprivation of all cheerful views, the contiguity of noises; the want of space for exercise and outdoor employment, defective constructional details, and the absence of that autocracy and unity of management which can be attained only in an independently built and organized asylum under one head.

This plan appears to have been almost universal in France; the insane, so far as they were looked after at all, were brought together mostly into the hospital or the hospice of the town, and there stowed away in the highest, the lowest, or the most out-of-the-way rooms, wards, or vaults, where their fellow-creatures might be least offended by their sight or sound. Some found their abiding place in prisons, where, if possible, their state must have been even more deplorable than that of their fellow-sufferers in the hospitals. It is not, however, our intention to write the history of the French asylums as they were. Esquirol, in the second volume of his great work (*"Des Maladies Mentales,"* 1838), gives an able sketch of their condition at the time he wrote, from which some conception may be formed of the miserable condition of the insane in France, although considerable ameliorations then had been already effected.

Although the system of confining lunatics in particular wards, or in the wings or detached buildings of general hospitals, still prevails in France, and, to the disgrace of those large and opulent towns of Lyons and Montpellier, yet we are happy to add, that its evils are everywhere recognised, and that asylums in the country are proposed to be erected in the place of the ill-suited town establishments. Unfortunately, the foreign wars in which France has been engaged, the domestic troubles which have overtaken her, the recent failure of one great source of her wealth by the vine disease, her laws of property and inheritance, and her large armies, have, whilst increasing the number of her dependent citizens, also increased taxes, and thereby have put it out of the power of the central and departmental authorities—at least in many districts—to proceed in that career of reform in asylum construction and management which Pinel and Esquirol originated, and Ferrus and so many other worthy followers have promoted. Nevertheless, France can now point to not a few most admirably-constructed asylums, from which our architects might learn some useful lessons—one at least of no little importance—viz., that our stereotyped system of wards is not essential in asylum building, but rather a serious error, which cannot be too soon confessed and given up.

There is one feature, which, as common to almost every French public asylum, deserves notice here, viz., that pauper and paying patients are received into the same institution; i.e., to use a common phrase, they are "mixed asylums." The paupers are

provided for by a general rate; the paying patients are subdivided into classes, according to the sums paid for their maintenance.

We will not at present extend these general remarks to greater length, but proceed with our notes on the construction and management, medical and moral, of those asylums which we had the opportunity of visiting; premising only that the amount of information to be given is varied by the circumstances of the visit, the time permitted for it, the facility for inquiring into details, the opportunity for collecting statistics, the character of our conductor, who at times was the chief, at others the second physician, and at others, again, only an "interne;" still, in all cases, we would most willingly acknowledge the kindness and courtesy everywhere received, and the readiness with which information was imparted. And, first, of—

THE ASYLUM AT MARSEILLES.

For several ages (since 1600, A.D.) the insane and other sick persons unsuited to the general hospitals of the city were placed in a building by themselves; and, after many vicissitudes, were collected in the Hospital of St. Lazare, previously a house for lepers, situated in the northern suburb, on the road to Aix. In this place, which Ferrus calls a disgrace to the city, they remained until the new asylum, about to be described, was opened for their reception, in 1835.

So long ago as 1823, the resolution was taken to build another asylum; and a premium having been offered for the best plan, that of M. Pinchot, the architect of the department, was selected. M. Esquirol was consulted respecting the plan, and inspected it and the proposed site in 1824; but matters were not definitively settled until 1830, when political events again interfered to prevent the plan being carried out, and it was not before 1833 that the construction was proceeded with. It was calculated to provide accommodation for 300 patients. In the course of the next eighteen years, the accumulation of patients and the demands for admission were so large, that a large addition to the building became imperative, and, in January, 1851, a new wing was commenced, consisting of five divisions, and capable of holding 340 inmates; and many important modifications of the original structure were proceeded with. At the period of my visit, in 1854, other alterations and additions were in progress, and little of the original building designed by M. Pinchot, under the auspices of Esquirol, remained, except the section appropriated to the residences and offices of the director and other officers.

The asylum is situated about a mile and a half out of Marseilles, beyond the Plaine St. Michel, in the Avenue St.

Pierre. It is placed in a valley ; the surrounding hills are bold and varied in outline, and the country has much beauty. It serves for two departments—that of the Bouches-du-Rhone, and that of the Var—and, at the date of my visit, contained above six hundred patients, all of them paupers ; the intention, however, was, so soon as accommodation could be provided, to receive also pensioners.

It is built of stone, found abundantly in the neighbourhood, and is everywhere of only two floors. Its principle of construction is that very much pursued in France, which Esquirol so ably advocated—viz., a group of buildings surrounding a square court, constituting hollow squares, and furnished with internal and external corridors. These hollow squares are arranged parallel on either side a central court, in the middle of which are placed the kitchen, scullery, baths, boiler-room, &c., and closing it in front, the chapel and corridor leading from it on each side ; behind, this central court is open to the garden, although some feet above it, owing to an artificial elevation of the ground for the proper disposition of the several structures. In advance of the chapel is a small court, surrounded on three sides by the buildings appropriated to the officers, and having a corridor running around it. There is also an open corridor of communication, extending backwards from the official residences, the entire length of the wings forming the two sides of the central court ; and from this again, on each side, a short corridor communicates with the kitchen.

The general disposition of the accommodation is that of sitting, eating, and work-rooms on the ground floor, and dormitories above ; in the divisions for the refractory, dirty, and epileptic, this rule is departed from by the construction of sleeping-rooms on the ground floor. No general system of lighting or of warming and ventilating is in operation. For day use there are a dining-room, an unfurnished room called a *chauffoir*, and a work-room for each division except the refractory, which has only a refectory or dining-room.

On entering, from the official residences, the corridor of communication between the several sections of each half of the institution, the first room reached is the visiting-room, in which the patients see their friends, who are allowed to visit once a week. It is a moderate-sized, comfortable room, furnished with tables and chairs, and its walls papered. Continuing along the corridor, we come to a door which opens in the centre of one of the divisions by a small hall, from which a staircase ascends in front to the first floor, whilst a door opens on one side into the work-room, on the other into the day-room (*chauffoir*). The dining-room is placed at right angles to the rooms just named, and can

be entered at one corner from the corridor, or, at its centre, from the enclosed court belonging to the division.

On the female side are two large work-rooms, furnished with many small tables, around which the patients were grouped in small parties, engaged in needlework and similar occupations. The attendant sat at one end, with a table and desk before her slightly elevated. The only attempt at ornamentation in these rooms consisted of a crucifix, with some other religious emblems and artificial flowers placed against the wall above the attendant's chair. On the male side the patients were employed in shoemaking, tailoring, and carpentry: the larger number in the two first occupations.

The day-room, or *chauffoir*, of each division is intended especially for use when the weather is unfavourable to out-door exercise. It derives its particular name from the presence of a stove in its centre, and is, in all other respects, little suggestive of comfort, and devoid of inducements to use it, inasmuch as, with the exception of a few benches, it is a bare, unfurnished room, saving what the religious fervour of some of the patrons of the establishment may supply in the shape of some saintly portrait and a crucifix. Except these *chauffoirs*, there is no room for the assemblage of the inmates to partake in general amusements.

The refectory, or eating-room, is only used at meal time, and, excepting the fixed tables and benches, is equally destitute of furniture with the day-room. In the wards for the clean and orderly, the dining-tables are made of a polished marble slab, supported on iron legs fixed to the floor. In the other wards they are of wood, but covered with figured oilcloth, and irremovable, which gives the advantage of a smooth, polished surface, easily cleansed. The walls here, as in the rooms generally, are plastered and coloured.

The windows on the ground floor all look inwards upon the enclosed court. In construction they follow the usual French fashion, and are of sufficient size, but everywhere barred with upright iron bars. Externally, also, are strong Venetian shutters (*Persiennes*), which seemed to be everywhere closed; indeed, so far as I could judge, they were rarely opened. Happily this practice deprived the inmates of no prospect, for the view of an enclosed court is not exhilarating, and cannot in justice be called a prospect. Moreover, any one acquainted with the sunny sky, the heat, and bright light of the south, will see some good reason for darkening the rooms which the dweller in our mirky, misty atmosphere could not surmise. Yet, withal, this shutting out of patients from external influences, and from the cheering face of nature, is a disadvantage and an evil, whether arising from an

unnecessary closure of shutters, or from the inevitable consequences of the faulty system of construction of enclosed courts.

The unpleasant appearance of bars and closed *Persiennes* was somewhat relieved by curtains and their appendages on the inside, furnished to the sitting-rooms down-stairs, and to some of the dormitories above.

One side of the block of buildings occupied by the dirty and epileptic patients—the ground floor—is devoted to dormitories, the floors of which are tiled, and unfurnished with carpet. The beds are placed along the entire length of the room, leaving a central avenue, two or three inches lower than the rest of the floor, and bordered on either side by a stone edging. Those of our readers who have visited the Salpêtrière, at Paris, will remember that a similar arrangement prevails there in some wards. What its purpose may be I cannot conceive, although its disadvantages are sufficiently evident,—for it forcibly recalls the arrangement of a stable-floor, and must frequently endanger a twisting of the ankle, a false step, or a stumble. The division for the refractory and noisy is the most remote from the central offices: it contains about twenty-four single rooms, placed between the open corridor on one, and an enclosed corridor on the other side, around two sides of a hollow square. On a third side was the common eating and sitting-room. The enclosed court was assigned to the patients for exercise; it was a bare, unpaved yard, without flower-beds. The corridors were floored in this, as in the other divisions, with asphalt. Each single room, or cell, was furnished with a bed fixed to the floor, and, in one corner, for the wants of the patient when confined in it, with a thick stone, hollowed out like the seat of a water-closet, having a utensil within the enclosed space beneath, which could not be reached except by a small door opened from the corridor outside, under the charge of the attendants. The cells were spacious and lofty, about 13 feet square; their window was placed high up, in size about $2\frac{1}{2}$ by 2 feet, without frame and unglazed, but fitted with three upright iron bars, and externally with a strong shutter having a spring-bolt and a drop-bar, and shut or opened from the corridor.

The doors opened outwards against the wall, and besides a lock, were likewise furnished with heavy bolts. An opening about 9 inches square, closed by a door, served for the purpose of inspection. As the doors were flush with the wall externally, there was necessarily a recess within the room, between the door-jambs, equal to the thickness of the stone wall, and being bounded by acutely cut angles, threatened danger to the patient or attendant in any possible struggle during ingress or egress, and a means of doing serious mischief to a patient so inclined.

The walls of these rooms were whitewashed, and the floors were of asphalt or stone. No padded room existed.

At the top of the stairs, leading from the ground floor, a dormitory opens right and left, the attendants' rooms being interposed. On the stair-landing were a stone sink, two taps for cold water, and a store-closet. Except those taps (*robinets*), no provision was made for ablution, whether in the dormitories or about the sitting-rooms beneath. The side of the attendants' room, abutting on the dormitory, was fitted with a small window for supervision,—a provision, however, of no great utility or importance where, as in this case, the apartment is used only at night, unless, indeed, the attendants are made watchers, and required to keep awake during the night—an obligation not to be imposed upon those who have borne the burden of the day. A moment's practical consideration will remove any impression which may be entertained theoretically of the advantages of inspection windows overlooking dormitories. For, supposing a sufficient light is burnt in the sleeping-room to make every movement visible, we are dealing with sleeping and sleepy attendants covered up in bed, deep in slumber from the day's fatigue, and indulging, it is to be hoped, in an oblivion of lunatics and lunacy. To expect such to be constantly peering through this window, or to be aroused by any rustle or movement going forward, is to expect something contrary to human nature, and to impose a degree of responsibility where it cannot be undertaken. Again, it is usual to glaze such windows—a practice which directly frustrates, in a great degree, their object, by opposing the transmission of sound; and the chance is, especially in the case of the nurses, that, for privacy sake, the window is screened by a blind, and the practicability of overlooking the ward completely marred. On the other hand, the existence of the window may be said, in the accepted phraseology of the day, to have a moral influence upon the patients, by favouring the notion of constant supervision of their movements; a conceivable influence and unobjectionable, if only it does not induce their guardians to attribute a positive utility to the means of exerting it, so far as to place confidence in it to the neglect of efficient measures.

However, to return from this digression, we are glad to say that at Marseilles this theoretical way of exercising nocturnal espionage over the inmates of the dormitories was not solely relied upon, but that a night-watch was provided, two attendants being set apart in each department of the asylum for that purpose—one being constantly on duty in the infirmary, whilst the other perambulated the several dormitories, which are partially illuminated by a small lamp in each.

Except the beds and a night-commode, the dormitories had no other furniture. Their floors were tiled, and the walls white-washed. Tiled bed-room floors strike an English traveller as cold and comfortless in appearance; but the natives of South France are accustomed to no other, and do not even look for the strip of carpet by the bed-side, which the hotel proprietor, pandering to the luxury of the English, is wont to supply.

The dormitories have windows on two sides, but those on one side have been constructed nine feet from the floor, and only about two feet six inches square. This faulty arrangement is, however, to be abolished, and the windows enlarged to the same dimensions as those in the opposite wall, which are in every respect satisfactory, except in being protected (?) externally by iron bars.

The bedsteads, placed against the opposite walls of the dormitories, so as to leave a central space from one end of the room to the other, are for the most part of iron: some wooden trough-bedsteads or cribs remained, but were in course of progressive removal. The bottom of the bedsteads was about two feet from the floor; on this was placed a straw pailasse a foot thick, and upon this, again, a flock bed; consequently the patient was considerably elevated above the ground. The further bedding consisted of a pair of sheets, a woollen blanket or coverlet, and a coloured cotton counterpane. In mischievous cases, or for extra warmth, quilted coverlets were put into use. The bedsteads in the epileptic dormitories were lower than those elsewhere; but in all other respects the same. In the case of dirty patients the flock bed was omitted, the patient sleeping on a bag of straw, contained in a sort of iron box constructed in the bedstead, and having beneath it an iron drawer to receive the urine which percolates through.

The infirmary for casual sick cases and paralytics was on the first floor, and differed in no respect from one of the dormitories, except that it had a few more beds in it,—viz., twenty or twenty-four, and that some attempt was made at ornamentation. No special form of bedstead or bed was in use to meet the exigencies of particular cases. A useful adjunct to the infirmary was added, in the shape of a small room opening directly from it, and furnished with a stove to heat the ptisans and drinks for the sick, and with other conveniences to provide for their varying necessities.

In the infirmary alone, of all the sleeping apartments, was there any plan for warming: this consisted in the economical use of the heated air from the stove of the room (the *chauffoir*) below, which passed from an air-chamber surrounding the furnace, through a wide flue, to the floor of the infirmary, and entered the

room through a brass grating. This plan was said to succeed, and to supply sufficient warmth.

A bath-house (*salle des bains*) was provided for each half of the establishment, and consisted of a distinct building, having three apartments, all lighted from above:—1. A waiting or dressing-room; 2. A bath-room for clean patients; and 3. One for the dirty. The baths, six in number, are arranged in a circle, leaving a central space occupied by the mains, and the hot and cold water-pipes proceeding from them, belonging to the several baths. At this part the water, hot and cold, was turned on or off. The baths are of copper, tinned, encased in wood, and severally furnished with a wooden lid, in two portions—one to cover in the chest of the patient, wider than the other, and capable of being slid backwards and forwards, by means of a sort of grooved joint, along the top of the bath, but fixed *in situ* when the other, the foot half, is put on. When in position, the lid is secured by fastenings on the sides of the bath, and the patient becomes a helpless prisoner, his head only appearing above the lid, through an aperture in it formed by cutting out a portion sufficiently large to give room for the neck, but too small to draw the head through. In fact, except that the position is horizontal, and the hands and feet are not passed through holes, the patient occupies as secure, and not a totally dissimilar position to a culprit in those more elaborately-constructed stocks contrived by our forefathers, in which not only the hands and feet were made fast, but the neck also secured in their grip, leaving the helpless head to dangle in its front.

These covers, or lids, are chiefly employed when the douche or prolonged bath is employed: we should, however, rather see them dispensed with in the former case, when violence or resistance and excitement have to be allayed; for the act of placing a violent patient in a warm bath is often difficult, and must be more so where additional apparatus is to be applied. In short, the whole plan, especially the forcible mechanical restraint, is calculated to arouse irritation, and to produce an impression of the exercise of undue severity. On the other hand, the administration of a prolonged bath almost necessarily involves confinement of the body within an enclosed bath, in order to secure its continuation for many hours. Each bath is perforated at the bottom in three places—one for the entrance of hot, another for that of cold water, and the third for a waste-pipe. This last is furnished with a valve, opened by thrusting downwards against it an iron rod, and consequently intended to be under the control only of the attendant. The baths and the bath-rooms were well kept.

The arrangement of several baths in one room, unless screens

or partitions are interposed between them, is open to objections on the score of delicacy; objections, by the way, of less weight in France, where the circumstance of man and wife using together the same bath is not uncommon. Some disadvantage, too, is likely to result from the plan, by extending excitement to others around, when an obstinate or refractory patient is to be placed in a bath; and again, it must be an odd sight to see two or three patients soaking in their prolonged warm baths for several hours together,—and we cannot imagine the feeling of company, under the circumstances, to conduce to the allaying of the excitement or irritation the bath is intended to secure.

Compared with reference to the conveniences provided in the asylums of our own country, where every want of the inmates is, as far as possible, anticipated and liberally met, the Asylum of Marseilles appears deficient; yet a rigorous comparison is scarcely just, where the differences in the habits and feelings of the people, especially among the lower classes, are in many respects so marked, and the wants and sentiments of the one people are scarcely recognised or felt by the other. This remark applies to many adjuncts to cleanliness and decency, and to feelings of moral propriety, considered of primary necessity on this side, but almost ignored on the other side of the Channel. For instance, the fact of several persons bathing together in the same room, as just cited; the absence of those conveniences for washing the hands and face—of towels, basins and soap—always ready for use—everywhere found in the lavatories of British asylums; and the comparative deficiency, the rudeness and uncleanness, of water-closet accommodation. This last in the Marseilles Asylum was particularly defective, as compared with that provided for in our institutions. On the dormitory floor there was no closet, but the wants of the inmates at night were provided against, as before stated, by a “commode” placed in each ward during the night, and removed by day. On the ground floor a single closet was constructed, apparently in each division, consisting of a perforated stone slab, very little elevated above the floor, not intended to be sat upon, but to be used *more Francorum*; unprovided with water to flush it, and placed immediately over a cesspool. Such a construction, however repugnant to English notions of decency and cleanliness, is after the fashion of the country, and doubtless our English water-closet would, for a long time at least, be unappreciated, and an object of much abuse.

The exercising court for each division occupies the square area, surrounded on three sides by the building, and open on the fourth towards the general garden of the asylum. It is necessarily of very contracted size, insufficient for the recreation of the patients, wanting in cheerfulness, and affords only a limited prospect

in one direction. The very excellent scheme of a sunk fence was adopted to separate the court from the external grounds; had this been unthought of, the only usual place for the patients' exercise would have presented the appearance of an enclosed prison court. Most of the courts were planted with shrubs and flowers, which imparted as cheerful an appearance as could be given them. The flower-beds were surrounded by a light rustic fence, not offensive to the eye, but yet, we believe, unnecessary for the preservation of the plants, and might be dispensed with advantageously.

The kitchen occupies a central position, at the posterior part of the large court interposed between the male and female sections of the institution, with each of which it is brought into communication by a covered way, or corridor, entering it on either side. The male and female attendants do not come into contact with each other in the kitchen, but have the food distributed to them through a serving-window placed alongside the doors, entering from the respective corridors. Internally the kitchen is spacious, and of ample elevation. At its centre is the large cooking apparatus, consisting of hot-plates, ovens, boilers, &c., surrounding the central fire or furnace, whereby fuel is much economized, and the facilities of cooking wonderfully increased. Except that this description of cooking apparatus renders roasting impracticable, it seems to combine, in every other respect, great advantages; for it never annoys by its smoke and dust either in the apartment or on the food; it obviates the glare and scorching of the open kitchen-range; it presents a most extensive surface for cooking over; it is very clean; and last, not least, it is much more economical. This fashion of the cooking-stove is finding its way gradually in this country, but it will take some years yet to make it general; for the majority of our cooks are a prejudiced and imperious race, and rule with a high hand in their own domain of the kitchen,—and possibly, also, they may be enamoured of that fiery complexion so characteristic of the craft, due, doubtless, very much to the glare of their open ranges.

Behind the kitchen is a boiler-room, whence hot water for culinary purposes and for the baths is derived. This room serves likewise as a scullery. Above it is the large water-tank of the establishment.

The wash-house and laundry are two detached buildings on one side the asylum. The arrangements of the wash-house followed the usual French plan, by having a large central tank of water, and on each side a narrow space, about three feet wide, separated from the rest by a bar. The usual washing-boards, upon which the clothes are rubbed and beaten, were fixed on the outer side, but so low down that the patients had to kneel at

their work. This is clearly a grave error, for it involves wetting the clothes about the body and legs; and the position itself is highly to be reprobated, the more so as inflicted upon patients.

The clothes underwent a preliminary process of boiling in some large oval coppers, with raised metal covers, fixed against the wall. A large drying-court adjoined the wash-house, and sufficed without recourse to drying-closets and in-door stoves,—thanks to the southern climate of Marseilles.

The linen and clothing stores occupied another building, and consisted chiefly of one large room, surrounded by shelves, partitioned into small compartments, and screened from dust by curtains. This apartment was in a state of beautiful order and cleanliness.

The chapel is central, being placed in the rear of the officers' quarters, and having a corridor of communication with each half of the asylum. It is small, and not calculated to accommodate more than fifty or sixty of each sex. The space occupied by patients is set back on either side of the high altar, and cut off from the central area by a latticed partition. Each recess has a gallery, in which the female inmates have their place, whilst the men occupy the ground-floor. Chairs are used to sit in, and the whole building is fitted up and decorated in the style usual in Roman Catholic countries.

The land belonging to the asylum is laid out as a flower and kitchen-garden, and suffices to supply the institution with vegetables and fruit. It is kept in very good order by the labour of the patients.

At the period of my visit there were about 640 patients in the asylum, the two sexes being in nearly the same proportion. Alterations and additions were still going forward on the male side, which, when complete, would increase the total accommodation. They were after the designs of M. Aubanel, the chief physician of the asylum, whose name is known in the profession as joint author, with M. Thorre, of a work on the statistics of insanity, based on the experience of the Bicêtre, near Paris.

Besides M. Aubanel, there are an assistant-physician (M. Sauze), two "internes," an apothecary, and a non-medical director. This last-named officer is a sort of steward, and is charged with the household details of the establishment, with the expenditure, and with the direction of the works, &c. The "internes" hold office for three years, and are under the direction of the physicians, acting as dressers, clinical clerks, and generally as assistants. The physicians visit at least twice a day, and are attended by their "internes."

The attendants upon the female patients are of a religious

Order, the "Sisters Hospitallers," and are under the control of a superior in the asylum, and the more remote but higher authority of the head of their order. Complaints against them are reported to the superior, who has the power of removal. These nurses are uniformly dressed in dark blue gowns, with broad, white, plain collars, and those remarkably eccentric, magnified caps which, by some vagary in his notions of millinery and fashion, the reverend founder of the Order has imposed upon them. The crucifix is an invariable appendage, along with its string of beads, and the more useful scissors.

The male attendants are of no Order, wear no uniform, and are dismissable by the chief physician.

The common dietary consists of three meals:—the first, at seven A.M., of chocolate and bread; the second, at eleven A.M., of soup and bread; and the third, at five P.M., of meat, vegetables, and bread, with an allowance of wine and water. Extra allowance is granted to those engaged in active work, and the sick are fed according to their requirements, under the supervision and control of the physicians.

Occupation is encouraged as much as practicable, and the patients' labour produces everything required for the asylum, except bread, which is procured from the town. Those patients engaged in work are employed between five and six hours a day, a considerable interval for rest and recreation being allowed in the middle of the day. Throughout the workshops and workrooms there was quiet and order, and much credit was due to the whole management of the institution for the state the wards and the inmates at large presented.

Unfortunately, I did not gather from the "interne," who most courteously conducted me over the asylum, the amount of information I could have wished respecting medical treatment. Prolonged baths are resorted to in cases of maniacal excitement, and the douche especially, as a means of repression, or as a punishment. Mechanical restraint is little employed, and only when deemed absolutely necessary; rarely any other means except the camisole is employed. Bed sores are rather common and severe—a circumstance indicative of inefficient nursing, and partly accounted for by the absence of water-cushions, or beds, to meet the wants of the bed-ridden, feeble, and paralytic patients.

From the scanty statistical details of the Marseilles Asylum in our possession, we find that, according to Raymond (as cited by Esquirol), there existed 96 inmates in the old institution in 1769; 121 in 1811, of whom 70 were males, and 51 females; and that between 1797 and 1818, 696 were admitted—viz., 345 men, and 351 women. In 1841 the number had augmented to

336; and according to official returns made in 1850, there were 444—206 male and 238 female patients. Lastly, in 1853, the total reached was 640.

These figures show a very rapid increase in the number of insane, or rather of those brought under treatment, particularly between 1841 and 1853. In the nine years between 1841 and 1850 the augmentation was not on nearly so rapid a scale as that between the latter date and 1853.

Upon a general review of the Marseilles Asylum, it must be admitted to be in a very satisfactory state; the patients appear well cared for, well nourished, and well clothed,—yet more, apparently, might be done for them, by supplying them with increased means for recreation and amusement, by allowing them liberty beyond the walls, by adding to the internal comforts—the furniture and fittings of their sitting-rooms—and generally by attention to those little details which tend to divert, instruct, and solace the mind under the unavoidable evils of seclusion from their homes and from society at large.

Looking to the building itself, it may be remarked generally that, whilst exhibiting many features of merit, it has those inherent disadvantages of its system of construction—that of enclosed square courts, which certain conveniences it possesses for management and classification cannot compensate. This is not, however, the place to examine the relative advantages and disadvantages of this or any other system, our business being the description of existing asylums, and not the consideration of the principles of asylum construction.

THE ASYLUM AT MONTPELLIER.

Montpellier, the capital of the department of the Hérault, and the seat of one of the three Universities of France, is particularly famous for its medical school, founded in the thirteenth century. From the period of its foundation until the present century, this school exercised an immense influence on the theory and practice of medicine; its professors and graduates were sought after throughout Europe, and brought to it fame and prosperity, whilst Paris was unknown except for the study of the scholastic philosophy. However, during the past century, the medical school of Paris has risen to eminence, whilst that of Montpellier has progressively declined; and although the latter has produced from time to time several eminent men, not a few of whom have migrated to Paris to share in its rising greatness, yet it has ceased to occupy a prominent position among the medical institutions of Europe, and has taken the rank only of a provincial university, almost entirely limited to the training of physicians for its own and the adjoining departments.

Unluckily, too, it has become jealous of its successful rival, and loses no opportunity of detraction; rejects its medical doctrines, and ignores as far as practicable the talents of its professors. At the same time, in its own small way, it loudly sounds its own praises, glories in calling itself the school *par excellence* of Hippocratic medicine; rigidly adheres to the hypothesis of vitalism, and the old doctrine of fluxions, and appeals solely to experience for its guide. On the other hand, it denounces as useless, or otherwise lightly esteems, minute pathological research, pathological chemistry, microscopic investigations, the applications of comparative anatomy and physiology, and was foremost in decrying the numerical method of the illustrious Louis.

The reader will not be surprised that such a school should decline; that one wilfully setting aside as useless all the appliances furnished by modern science and progress for the more complete investigation of medicine, and for placing it on a sure basis, should cease to influence the medical doctrines of Europe.

The importance of Montpellier as a university town and an important medical school, might naturally lead one to expect its medical institutions, and among them its asylum for the insane, to rank among the best in France. However, this is by no means the case; for the benumbing influence of indifference to modern progress has operated to the prejudice, and to the comparative neglect, of the wants of the insane.

The existing asylum is deficient in almost all those conditions which are now all but universally held essential to the well-being and the treatment of lunatics, and presents numerous faults, both in structural arrangements and internal management, which, alas! there appears little immediate prospect of seeing amended.

It is situated in the suburb of the city, very near to the Medical School and to the Botanic Garden, and constitutes a section of the Hospice for old paupers and venereal cases: it is likewise, as in similarly associated asylums, under the same administration, has the same general offices, the same chapel, kitchen, laundry, dispensary for medicines, stores, &c., and receives provisions, contracted for in the town, through the hands of the same steward. Moreover, the connexion of the two is so intimate that many of the dormitories for the insane are no other than wards of the hospital.

As the asylum of Montpellier can in no respect be put forward as a model, the description of its plan of construction need only be brief. The oldest portion, specially constructed for the care of the insane, was commenced, on the male side, in 1821, according to Esquirol's model of a square court, surrounded by a row of single rooms, or cells, of only one story, except at the angles, where there is a first floor. In 1824, a similar division was pre-

pared for the females. These square courts are completely enclosed, are entered by an open iron gate from one side, and surrounded by a covered corridor, supported on clumsy, thick, square stone columns. The floor of the corridor is, moreover, raised about fifteen inches above the level of the open court, and is covered with asphalt or paved with stone. The enclosed bare court necessarily offers a very restricted and most prison-like place for exercise. Each cell is about 12 feet square and 10 feet high; it is entered directly from the corridor, and lighted by a small window about $1\frac{1}{2}$ feet by 2 feet, placed on one side the door, unglazed, well barred, and defended by an external shutter of wood, kept closed during the night, and at such other times as thought fit. The floor is paved with stone, and the stone walls whitewashed. The furniture consisted of a heavy thick wooden crib, fastened to the floor; this was filled with straw to constitute the bed of the inmate, who, if clean, had an upper and under sheet, but if not so, only the former, and then lay in the loose straw of his trough-bed. A coarse woollen coverlet and blanket above completed the bedding furnished for ordinary use to the patients in this, the refractory division. Each cell bears a number, engraved on a small brass plate inserted in the wall above the door.

The very objectionable construction of these sections being recognised by the medical authorities, they are used for only the worst of the refractory and noisy cases, as a constant residence, and consequently are not commonly fully occupied. Still, I saw two or three cases confined to their beds in these miserable rooms, on account of bodily ailment.

The first addition, in 1823, to the section described, was that of a range of one-storied buildings, containing a dining-room, a *chauffoir*, or room for exercise, furnished with a stove and a dormitory. The dining-room is a long apartment, with a double line of tables and benches, leaving between them a central avenue. The tables are of wood, stained and polished, and both they and the room at large were kept in very good order. The floor is paved, as in all other rooms; the walls whitewashed and bare; and the windows insufficient to thoroughly and cheerfully light the apartment. The drinking vessels are of pewter; knives and forks are allowed to all, save those considered particularly untrustworthy. All the patients are brought together at meals, except those who are refractory, and require to be served in their own rooms. Contiguous to the refectory is a small serving-room, where the food is received from the kitchen preparatory to its distribution. The *chauffoir*, intended as a day or exercising room, particularly for the more troublesome and the dirty inmates, is a long, dreary, bare room, with whitewashed walls, stone floor, and

a rude bench fixed against the wall. We conclude that its name is derived from the existence of a stove near its centre—a useful appendage, certainly, in cold weather, of which Montpellier has a fair share, especially from the prevalence in winter and spring of cold, biting north-east winds, but rendered as objectionable as possible in appearance by the construction around it of an iron cage or guard, formed by stout angular iron bars, and of very considerable height. The windows are placed along one side only, and are securely barred with upright iron bars. Beside the fixed bench, the only other article of furniture was one of an unprecedented character in my experience. It was a stout, wrought-iron arm-chair, fixed firmly to the floor, near the stove, having its framework pierced here and there with round and square-out holes, for the passage of cords and straps to confine the arms, legs, and waist of its occupant. The appearance of such a contrivance of itself indicated that, in the conception of its inventor and patron, strength and mechanical force were primary principles in the management of the insane. Although we were most pleased to learn that this chair had not been put in requisition for some few years, yet the pleasure would have been greatly enhanced had we heard of its expulsion altogether from the asylum, and of its transference to some museum of barbarisms of the dark ages. If unused and thought unnecessary, why was it retained? To this query we got no answer; it was there, and it seemed a trial to part with so ancient, well-tried, and energetic an appurtenance of the establishment. Perhaps it was held up *in terrorem* before the refractory; a utilitarian purpose much to be deplored.

A third section of the block of building in question is a large dormitory, having a row of beds on either side, whitewashed walls, and a stone floor. The windows are of sufficient size, of the French casement model, and barred with upright iron bars; at night the room is partially lighted by a single gas-jet. This dormitory is principally occupied by epileptic and dirty patients who are somewhat refractory; hence their beds and bedsteads, or cribs, resemble those provided for similar cases in the single rooms, and are equally unsatisfactory.

Besides the *chauffoir* and refectory rooms named, there is yet another attached to this division, viz., a small sitting-room, which has some pretensions to commonplace comforts and furniture. Those entitled to the benefit of this apartment were of the class of pensioners, and not the indigent. Here smoking was allowed, and amusement with cards and dominoes indulged in.

At another part of the asylum precincts, on the male side, was a one-storied outbuilding, containing a day-room for younger inmates, devoid of everything which an Englishman understands

as comfort—small, bare, except of whitewash, and its only fittings a table and bench. Connected with it was a very small, confined, dull, damp, unpaved court, surrounded by other buildings, as little fitted as the day-room for its purposes, but otherwise calculated to engender despair, or to plunge into dementia its unhappy prisoners.

At this asylum there is a separate division for criminal cases—*détenus*—consisting of a few single rooms, a *chauffoir* or sitting-room, and a small general court. Two of the cells were of recent construction, and regarded as models. Each had a small window alongside the door, entering from the common court in front, and behind, in its back wall, a perforated metal plate, and another door opening outwards into a miniature court belonging exclusively to the cell. One great object of the back door was stated to be to secure a thorough draught and complete ventilation—an advantage, however, to be gained only when the cell is not occupied, or the patient is in the little back court. The window is closely barred, and further protected and darkened by a shutter outside. The ceiling is vaulted; the walls of stone, whitewashed; and the floor of asphalte, well laid. Each cell appeared from 12 to 13 feet by 10 feet in area, and 11 feet high. The idea of these new single rooms, each with its own little court, was undoubtedly derived from Auxerre, where it may be seen carried out much more completely. The common court in front of the row of cells was small, and nearly as unfit and wretched as that of the lads' quarter. In each cell the bedstead was fixed against the wall on one side.

Other apartments on the ground floor are, on the male side—the shops for carpenters, tailors, and shoemakers, and straw-plaiting, but they call for no special description; the only remark to be made being that the inmates were pretty well occupied, and the work carried on quietly and regularly. On the female side was a large, nearly square, well-kept work-room, in which it was gratifying to find some seventy patients, almost all engaged in needle-work, spinning, &c. Another pleasing feature in this room was the presence of some singing-birds hung in cages against the wall, in addition to the not unusual appendages, the crucifix and the Madonna. As if to neutralize any pleasurable effects that access to this the most comfortable room the patients possessed might possibly induce, the windows were barred in the usual fashion, and the stove surrounded by a cage 5 feet high, formed of stout iron bars, crossed diagonally, and painted of a brown colour. Surely the authorities of the asylum would be sorely puzzled to show cause for such supererogatory barring of common sitting-rooms on the ground-floor, where the occupants are constantly under the eye of one or more attendants, and their escape

by the windows nearly impracticable. But the conservative principle of the medical school seems to haunt the asylum, and to stand in the way both of alterations and of innovations. This work-room served also, until the completion of the new wing, as the female dining-room. Its furniture consisted of some fixed tables, chairs, and fixed benches; it was well lighted by the windows, and when required could be moderately illuminated by two gas-burners.

Passing from the one-storied buildings of the asylum proper, we come to those portions of the hospice occupied by the insane, consisting of several wards used as dormitories, and one on each side—male and female—as the infirmary. This last-named apartment is on the first floor, and holds twenty beds. It is heated by a stove, about 4 feet high, placed in the centre, unprotected on the female side by a guard, although at parts its case had almost reached a red heat. The barred windows, furnished with outside *persiennes*, were tightly closed, and although it was winter, the room was disagreeably warm, and what was worse, the air was impregnated with the fetid vapours from the sick and foul patients; for infirm patients, whatever their habits, are brought together in the same ward. Respecting the room itself there is little to desire. Like the dormitories contained in the hospice, it was a fairly-proportioned room, of good elevation, with tiled floor, and, like them, was lighted at night by a gas jet. The bedsteads and bedding varied according to the character of the cases, some of which were paralytic, others epileptic and infirm, and others, again, labouring under some bodily disease of more or less severity, accompanied in a few with such mental excitement as was deemed sufficient to justify restraint by the camisole, or by fastening to a chair, where lying in bed was not enforced. The bedding for patients of dirty habits, and for epileptics, has been already noticed; for the clean there are a flock-bed, an upper and under sheet, a blanket, and a brown woollen rug or coverlet, in the infirmary; but in the ordinary dormitories this last was only of figured blue linen or cotton. The condition of the bedding was not everywhere satisfactory; in the infirmary some of the coarse woollen coverlets were ragged and patched, and the sheeting given to foul patients was exceedingly coarse and brown.

No bedsteads were constructed to meet the particular requirements of the paralytic, epileptic, and unclean inmates. Once, indeed, a something was tried for the epileptics—viz., the legs were nearly entirely sawn off from the common cribs, whereby the bed-bottom was brought down close upon the floor; the consequence was, the remedy was worse than the disease—dust, damp, and in some cases the urine, accumulated beneath, en-

gendering dirt and bad smells, and the ill-conceived contrivance had to be given up. Now the epileptics, if dirty, sleep in a deep crib, of the ordinary make, among loose straw, into which they sink and become secure against falling out during a fit; if, on the other hand, they are clean, they are afforded the indulgence of an under-sheet to lay upon the straw, or, in rarer instances, have a less thick bed and paillasse than those supplied to cases uncomplicated with that fearful malady.

For those lost to notions of cleanliness and decency, nothing special was attempted: the patient had to repose in a heap of loose straw filling up the trough of his bed; whilst the disgusting practice prevailed of letting the urine run through the bottom of the bedstead on to the stone or tile floor beneath, where it would frequently remain until evaporation had diffused it through the air.

The dormitories for the generality of the inmates were in good order and sweet, and contained from twenty to twenty-five beds each, arranged on either side, not more than from eighteen inches to two feet apart, and leaving a passage up and down the middle of the room. They had the usual gas-lamp, but were not warmed. Unlike the provision made for refractory and dirty cases, the bedsteads were of iron, and the bedding was made up of a paillasse, a flock bed, a pair of sheets, a blanket or two, and a blue linen coverlet. At the foot of each bedstead was a chair. As remarked in our notice of the asylums of northern Italy, the custom of the people is to lie high at night; so it is in this part of France, for we find that the top of the bed, by reason chiefly of the thickness of paillasse and bed, is from three feet to three and a half feet above the ground.

All the patients, with the exception of the very troublesome and noisy, sleep in dormitories, where they are under the surveillance of one or two attendants who sleep in the same apartment with them, as well as of the night attendant who perambulates the several parts of the building. In the infirmary there is always an attendant on duty night and day. Night commodes are provided in the dormitories, but no water-closets. Before going to bed, patients needing such care are attended to, and are besides got up in the course of the night; a proceeding which has been found to answer in many instances, although the number of dirty patients at Montpellier still is considerable.

The type of water-closet is "homological" with that seen at the Marseilles Asylum, yet the actual condition of things is worse. Lavatories, soap and towels, are, as usual in continental public institutions, wanting; indeed, at Montpellier, not even a vessel of water with *robinet* was anywhere seen. For personal

cleanliness, therefore, the only opportunity is to be found in the occasional use of the warm baths.

The bath-house, according to custom, is a detached building; one for each department. It is ill-built and defective; the floor of stone, badly laid, uneven, and consequently always wet. The baths themselves are massive stone constructions, and furnished with heavy wooden lids, securely fitted upon them when required by strong iron fastenings. The supply of water, hot and cold, is by two taps placed above the foot of the baths; the waste pipe leading from the bottom. The baths are placed in a row alongside the wall, and between four and five feet above them is a horizontal water pipe, from which a short leather tube is suspended above the head of each bath to administer a douche. By this arrangement every douche-jet has equal force, and that variety which many physicians think desirable is unattainable.

As before intimated, the general offices are common to the asylum and the hospice, and do not afford occupation to the patients.

On the male side there are four airing courts: of these we have noticed three; the remaining one is also small, although superior by being not only planted with trees, which are indeed seen in two of the others, but laid out as a small flower-garden. The vicinity, however, of some houses, renders a high wall necessary around it. But besides the courts, there is a good-sized garden, which gives employment to several patients in the cultivation of vegetables and flowers. On the female side are three courts and a small garden for their use. The refractory court is bare, but the others are planted with trees, flowers, and shrubs. The flower-beds are protected by a slight railing, painted green; which, however unnecessary, has the merit of not being offensive to the eye. By the arrangement of the several parts of the asylum, the garden is nowhere visible except from some of the upper dormitories, and hence one great advantage of an open space about an asylum is lost—viz., the prospect of something more than the self-same court hour by hour, or day by day.

To refer now to the principles of management and treatment. The asylum, as a mere section of the hospice, is under the same government. This consists of a board or commission, constituted of the chief government officials and some few gentlemen of the department. These are charged with the supervision of the mode in which the institution is managed, have entire control over its funds and over every item of expenditure (which must receive their approval), and they appoint officers and servants. Their ruling principle is economy, cheapness, and the curtailment of the expenditure. To this board is no doubt principally chargeable the

existing unsatisfactory and discreditable state of the asylum; for in all instances where to avoid expense is the primary rule of management, improvements are not to be looked for. What has been, and sufficed, may still be and suffice,—appears to be the Chinese maxim by which the authorities of the Montpellier Asylum are guided, and the maxim is equally fruitful of mischief and inefficiency as with the “Celestials.”

The local representative of the Board exists in the person of the Director, appointed by it, and armed with the chief authority in the entire establishment, both hospice and asylum; subordinate to the Director is the Physician of the Asylum, an office at present held by M. Cavalier; he has under him an interne, who retains his appointment for three years. The physician is required to visit the patients twice every day; the first and principal visit is made between eight and nine in the morning; the second, usually directed to cases requiring particular attention, and of brief duration, in the afternoon. The duties of the visiting-physician are by no means formal, for they include the direction both of the moral and medical treatment, and are, as we personally witnessed, very thoroughly performed by the present officer. In his morning visit he goes throughout the building, receives reports of all the occurrences in it since his last visit, prescribes medically for all patients requiring it, directs, and in the case of douche, often superintends the administration of the baths, regulates the classification and employments, orders extra diet where required, and revises the general dietary every week. He is not precluded from private practice, and the appointment is tenable with a chair in the university.

M. Cavalier has occupied the post of physician between four and five years; and prior to that period was the “interne.” His experience, therefore, has necessarily been considerable in the treatment of insanity, and we can testify to the zeal he displays in it, and to his kind and conciliating manner to patients, especially to the melancholic. He is a staunch believer in the efficacy of medical treatment when resorted to sufficiently early in the disease, and on this account devotes much time and pains to the investigation of bodily disorder and to its therapeutical treatment. It is nevertheless to be regretted that M. Cavalier has not had opportunities of examining the construction and management of asylums where modern innovations have found favour, and supplanted the ancient belief in the necessity of coercion, of bars, of high-walled courts, and of those many other deprivations of the consolations and comforts of life. To do him justice, however, we must mention that he is not insensible to many of the deficiencies and grave faults of the asylum he superintends, and is most desirous to see reforms affected; but the economical (?)

tendencies of the committee form an apparently insuperable impediment to the realization of his wishes. The "interne" who was in residence during my stay at Montpellier, was M. Campaña, a Spaniard by birth, but educated at Montpellier to whom I must make acknowledgment for the civility and attention received at his hands. Since that time I am glad to hear he is in charge of the asylum at Avignon. The "interne" has furnished rooms, board, light and firing, and receives a small gratuity. He has to carry out, or see carried out, the directions of the physician, keeps the registers, and is responsible for the good working of the asylum in the physician's absence.

The attendants do not belong to a religious order. In proportion to the number of patients they are nearly as one to twelve. Both male and female attendants are clothed uniformly. The men wear a blue jacket, brown trousers, and a felt cap; the women were neatly dressed, and did not rejoice in those marvellous caps, the exclusive and quaint appendages of the heads of those under religious vows, particularly the Sisters of Mercy of St. Vincent de Paul.

The patients admitted into the asylum are of three classes—viz., pensioners, paupers, and criminal lunatics (*détenus*). In 1854, their total number was 375—to wit, 260 males and 115 females. Among these, 10 men and 3 women were accounted paralytic; epilepsy was equally prevalent in the two sexes, but was not a common complication.

A uniform dress was provided for the patients. The women were in general neat and clean in appearance; but the men were many of them slovenly dressed, with their clothes ragged and in disorder. As might be expected, this happened chiefly among the refractory, for no specially contrived dresses were provided to meet the requirements of such, or of any other class of patients presenting particular symptoms.

The ordinary diet-table provides four meals a day. The patients rise at six o'clock, and at seven have a slice of bread with coffee, and an apple or some other fruit; at eleven, soup with vegetables; at four in the afternoon, a dinner of soup, bread, and vegetables, on three days in the week with meat; and, lastly, at six, they receive a portion of bread. Wine diluted with water is allowed at their two chief meals; latterly the quantity has been much lessened, owing to wine (even in this wine-growing district) having advanced to four times its customary price. Of the vegetable food taken, peas (of two sorts), harricot beans, and rice cooked in several ways, form the staple. The food is inspected by the physician or interne, and may be rejected by them if thought unfit.

Employment is as much as possible promoted. About one-half of the male patients are occupied in the garden and grounds

of the institution, and in the workshops. The tailors' workshop was the best filled: in all the shops the greatest decorum and quiet were observed. A party of men is selected and entrusted to go out into the town and its vicinity to bring back requisites for the asylum use. Those are not chosen who belong to the city, and are acquainted with it and with persons living in it. On one day I saw a band of thirty, carrying hand-barrows, and proceeding in a sort of loose military order, under charge of three attendants; for none are ever allowed to be out by themselves. One attendant preceded them, whilst the other two brought up the rear. Moreover, about thirty male patients leave the asylum daily to work at some little distance in the country, at quarrying stone for building, in cutting timber, preparing wood, &c.

Of the women, two-thirds are employed in needlework, in house-cleaning, straw-plaiting, and the like female occupations.

A very complete record is kept of the occupations of the patients, showing the nature of the employment, the length of time engaged in it, the manner in which it has been undertaken, whether with alacrity or unwillingly, and other similar particulars.

Little is done in this asylum to provide recreation or amusement for the inmates. Excepting dominoes and cards in one section, I did not see any other pastime. Books and papers, if allowed, are extremely scarce, and not provided by the institution; the reunion of patients at concerts, dances, lectures, and the like, has not been contemplated, and out-door amusements are out of the question from want of space.

Novelists are fond of representing the peasantry of South France as given to revelry and perpetual gambollings to the sound of the pipe; and this might be true of them in the olden time under their good king René, but it is purely mythical of the present generation, which is sufficiently dull, heavy, and ignorant. They retain their ancient language, the Provençal or *Langue d'Oc*, and are many of them unacquainted with French. It would be well were the schoolmaster abroad in this portion of France; indeed, it would be a happy thing could he penetrate into the Asylum of Montpellier, and diffuse a better knowledge of the moral treatment of the insane, illustrated by the practice in other parts of Europe.

There is no chapel for the exclusive use of the asylum. The patients attend once every Sunday at the chapel belonging to the hospice; and they are visited by a priest from time to time, or when his ministrations are called for to the dying: his visits being under the control of the physician.

The patients are allowed to see their friends, under the sanction of the physician, twice a week, and have a room set apart for the

purpose. An attendant is always present during the visit, and is expected to render an account to the medical officer of the behaviour of the patient, of the conversation, of inquiries and complaints made, in short, of all that has passed.

To come, now, to details touching the medical treatment. Restraint is largely used, notwithstanding the principle professed is to employ it only where absolutely required; but, as usual, the sanction of its employment affords a loophole for its frequent use; the indolent or the unmerciful, and the attendant without forethought and readiness, or measures of expediency, will discover sufficient reason for its adoption, and be ever ready to justify it even where its application must be reported to the superintending physician. At Montpellier the ordinary means of coercion is by the camisole, and occasionally by belts and straps to confine the limbs or the trunk. The rule with homicidal criminal patients seems to be to keep them constantly confined: one such male always wore a camisole when not shut in his room, was regarded with fear, and was no doubt led, by his treatment, to believe himself a very formidable character, and to endeavour to prove his ferocity when he got a chance of doing so.

On the occasion of one visit to the female side of the house, I noticed seven women wearing the camisole in the refractory ward, and one in the work-room; another was held in a clumsy wooden arm-chair by a piece of stout tape loosely tied around her waist, which could indeed serve as a means of restraint only to her morbid apprehension. In the infirmary a few were restrained by camisoles, and some others confined to chairs constructed to allow the escape of the excretions from their persons; a beastly connivance, too common, we are sorry to say, in French asylums.

It was assured that none were fastened in bed at night, except under very extraordinary circumstances.

The douche is exclusively employed as a punishment, and as such is in pretty frequent requisition. It is not used as a therapeutical agent, but only for those who are refractory and violent, or who refuse to work or to take food. With the last object in view it was represented as very successful, and that forcible alimentation by the œsophageal tube had not been resorted to for three years, although refusal of food had been a circumstance of no uncommon occurrence. The duration of the douche is regulated by the physical condition of the patient; and its application is always made under the superintendence of the physician, or of his assistant, the "interne." It is sometimes repeated in the course of the same day. The vertical fall of the stream is, however, as before stated, not more than four feet, and its shock, therefore, is not very great.

Prolonged baths are frequently used in acute mania to allay

excitement and to induce sleep. They are unsuited to weak patients, and their effects require to be diligently watched. According to the severity of the case and the strength of the patient, they are continued for ten, twelve, and even for twenty-five hours. Food and medicine are administered during the bath, and in some instances a thread of cold water is allowed to trickle over the shaven head.

The selection of medicinal agents is regulated entirely by the physical symptoms of the patients, and no general mode of treatment is pursued. Opium and morphia are very seldom given, for there is a hypothetical objection to them prevalent in this part of France, as well as in Italy—viz., that they cause a revulsion to the head, and accelerate the onset of dementia. In lieu of opiates, therefore, conium and hyoscyamus, along with their active principles and preparations, are employed.

The question of the relative advantages of dormitories and single rooms has been much discussed in this country, and strong opinions expressed; the majority, we think, against dormitories, except for a comparatively small class of patients. We shall see, in the course of our examination of foreign asylums, the use of dormitories for almost all, in some places indeed for all, patients. Here at Montpellier, some twenty-four cells were provided in each division—male and female; all the other sleeping accommodation was in dormitories. But, in fact, this proportion of single to associated sleeping-rooms did not exist, for all the cells were not occupied, and had not the demand for admission been so great that room in dormitories could not be given more largely, still fewer single rooms would have been used.

M. Cavalier's opinion was decidedly in favour of dormitories for the whole population, with very few exceptions; and as the result of his experience, he stated that it is rare that one patient disturbs another; that, on the other hand, he has found those who were restless and noisy by themselves in single rooms, become quiet when placed in a dormitory. Even epileptics do well in dormitories—a class of patients which many who recognise the utility of common sleeping-rooms over single ones, have a strong feeling against their association together at night. M. Cavalier has never known an accident or ill consequence occur in the epileptic dormitories, even where an access of furor has overtaken one of the inmates. In such instances, indeed, speedy attention is required; and this is ensured by the presence of attendants in the apartment, which is always secured. Moreover, the physician mentioned would have no dormitory to contain less than twenty beds, and approves of the association of even larger numbers.

Upon a review of the preceding account, we may observe that

the asylum at Montpellier is to be condemned on account of its site, its too limited area for exercise and employment, its confined, high-walled, and enclosed courts, its most faulty construction, its connexion in general administration with the adjoining hospice, its deficiency in almost everything to solace its unfortunate inhabitants, its management by a non-resident officer, and in the paramount control exercised by non-medical men. We need not sum up the remarks on the internal management, medical and moral; yet we are desirous to testify to the attention given to the former, and should, on the other hand, be glad to awaken an increased interest in the moral and physical state of the asylum occupants. The women's side of the house was better kept than that of the men; but everywhere the dormitories were clean, and orderly, and sweet, with the exception of the infirmaries. The presence of a few birds and domestic animals about the day-rooms; of pictures, flowers, and ornaments in general; would much enliven the abode of the poor lunatics. Moreover, the construction of some decent water-closets, of lavatories, or of some means to promote personal cleanliness, the provision of a few articles of furniture, the introduction of periodicals and books, and of other means of amusement, would render the present most ill-adapted building a somewhat less objectionable residence for the insane than in its present state it is.

An attempt to adapt the present structure to its purpose would be fruitless, and a waste of money. This fact is so obvious, that the authorities of the asylum have determined to erect a new one; yet, it will be read with astonishment, their intention is to retain the same site, so little knowledge have they of what is requisite to the well-being and recovery of the insane. The new edifice was already in progress when we stayed at Montpellier, and a new wing, in rear of the existing asylum, was considerably advanced. This was a two-storied structure, of stone, and certainly an improvement upon the old building. As it was designed to relieve the present asylum, which could no longer meet the wants of the department, its accommodation was particularly planned to supply existing deficiencies, whilst it should at the same time harmonize as a section of the projected new buildings. On the male side, therefore, it would furnish a billiard or amusement room; and an infirmary specially for dirty cases, on the ground floor, and above, additional dormitories. On the female side, the similar extension of the asylum would supply an infirmary and work-room on the ground floor, and dormitories above. The precautions for the safe custody of the inmates are unluckily to be repeated, and the windows to be guarded by iron bars; with this improvement, however—that the external bars are to correspond

in figure and position with those of the casements, so that they may be unperceived when the latter are closed.

The retention of the same site for the projected new asylum, entails the perpetuation of many of the worst evils of the present establishment, and cannot be too strongly deprecated by all who are interested in the welfare of the insane. The site is objectionable by its proximity to the town, and its immediate vicinity with a low suburb; by its limited area, which will never admit of sufficiently extensive airing courts and ground for employment, and by its involving the continuance of the prejudicial connexion between the hospice and asylum.

Some excuse may be found for the faulty position of the Venetian asylums, since for these no other and better can be found except on the distant mainland, a removal which would cause not only great immediate cost, but always occasion difficulty and much expense in the carriage of patients. But here at Montpellier, the authorities have on every side numerous most eligible positions for the erection of an asylum, with all the advantages of greater healthfulness, of ample ground for cultivation, and of fine and cheerful prospects, in short, of all those external conditions calculated to divert, to alleviate, and to heal the disordered mind.

It would have added interest and value to this history of the Montpellier Asylum could we have appended the statistics for some years past; these, however, were not obtainable, not being published, but buried among the departmental archives. The only details in our possession belong to the four years from 1829 to 1832 inclusive, and are given in an excellent record of the clinique of M. Rech, a former physician of the asylum, to whom Esquirol attributes the high merit of having "overthrown the fatal prejudices against the insane in a country where some regarded them as outcasts from God, others as the peculiar favourites of heaven, and where all agreed in believing them incurable."

According to the statistics referred to, there were resident in the asylum at the commencement of 1829, 57 men and 50 women, in all, 107; admitted in the four years between 1829 and 1832 inclusive, 89 males and 52 females, together, 141. During those four years there died 27 men and 19 women, or 46 in all; were discharged cured, 23 men and 19 women, together, 42; and uncured, 13 men and 6 women, in all, 19. The proportion of deaths in the two sexes, taken in relation with their relative number, is 1 to 13 among the men, and 1 to 15 among the women. The ratio of cures, calculated upon the admissions, was about 80 per cent.; and during the four years in question, was greater among

the females than the males. Considered with reference to the form of the malady, there were of the 107 existing at the beginning of 1829, suffering from—

Mania	24
Monomania	13
Dementia	49
Idiocy	8
Intermittent mania	2
Epileptics	11

107

Of 151 admissions, there were suffering from—

Mania	40
Monomania	36
Dementia	45
Idiocy	12
Intermittent mania	8
Mania with delirium	1
Epileptics	9

151

Among the cured were—

Mania	23
Monomania	11
Dementia	8

42

There died from—

Mania	6
Monomania	4
Dementia	24
Idiocy	1
Epilepsy	11

46

The assigned causes of death were—

Cerebral affections	21
Diarrhoea	9
Phthisis	9
Slow fever	4
Contagious fever	1
Pneumonia	1
Pleurisy	1

46

In 1835, the population, as Esquirol records, had reached to 158—viz., 75 men and 63 women. In 1825, it was only 75, but in the course of the three following years there were 106 admissions.

The most complete statistics of an institution are liable to engender fallacies, and, in the opinion of some, can be made to prove anything; but whatever the defects of statistics may be when sufficiently extended, those few which we have been able to obtain of the Montpellier Asylum are certainly insufficient to draw any general inferences from, which have value enough to make them worth a place in this paper.

ART. VI.—THE PRESENT STATE OF LUNACY IN ENGLAND AND WALES.

THE Twelfth Report of the Commissioners in Lunacy has been recently published, and it contains much important information respecting the public and private provision for lunatics, and the statistics of lunacy in England and Wales. The Report is dated the 31st of March this year, and it would appear that steps have been taken in several counties to provide increased accommodation for pauper lunatics, and that considerable progress has in this respect been made since the previous Report. New sites have been purchased, and plans for additional asylums have been prepared, and have received the approval of the Secretary of State; buildings already in course of erection have been materially advanced towards completion; and additions have been made, or commenced, at several existing asylums where the accommodation had been found inadequate to the wants of the district.

The present accommodation for pauper lunatics in existing asylums in England and Wales, amounts to 7516 beds (including infirmary beds) for males, and 8715 beds for females. The Report states that, when—

“The buildings now in progress are completed, the total number of additional beds will be as follows:

In new Asylums	2336
Additions to existing Asylums	2481
Total	4817

And if to this estimate of the most recent additions to the public accommodation provided for pauper lunatics, we apply the ratio of increase in the numbers requiring accommodation observable during the last year, some conclusion may be formed as to the period for which these additional beds are likely to be found sufficient to meet the constantly increasing wants of the country, and how far they will tend towards the object we have sought most anxiously to promote ever since the establishment of this commission, namely, the ultimate closing of licensed houses for pauper patients.

"On the 1st of January, 1857, the number of pauper lunatics in the county and borough asylums, hospitals, and licensed houses amounted to 16,657. On the 1st of January, 1858, this number had increased to 17,572, showing an increase during the year of 915 patients. And of the total number, 2467 were confined in the various metropolitan and provincial licensed houses.

Assuming, then, that during the next two years the progressive increase in the number of pauper lunatics will be at least equal to that of the year 1857, it follows that on the 1st of January, 1860, accommodation for 1830 additional patients will be required; and if to this number be added the 2467 patients who are now confined in licensed houses, there will remain to meet the wants of the ensuing year only 520 vacant beds. It is obvious, therefore, that if licensed houses are to be closed for the reception of pauper patients, some scheme of a far more comprehensive nature must be adopted in order to provide public accommodation for the pauper lunatics of this country."

The following table shows the situation and projected accommodation of the asylums now in contemplation or in course of erection, and the period when they will probably be fit for occupation:—

—	Number of patients for whom accommodation will be provided.		When to be completed.	—	Number of patients for whom accommodation will be provided.		When to be completed.
	M.	F.			M.	F.	
Cumberland	100	100	October, 1860.	Sussex	200	200	Mar. 1, 1859.
Durham . .	157	155	December 1, 1858.	Cambridge . .	125	125	May, 1858.
Carmarthen .	135	135	Quite uncertain.	Beds, Herts, and	252	252	Uncertain.
Bristol . .	100	100	1859.	Hunts } Northumberland }	100	100	Sept. 1, 1858.

The aggregate cost of these new asylums will amount to 381,827*l*.

The Commissioners objected to the northerly slope of the land upon which the Bristol Asylum is to be built, also to the insufficiency of the ground in quantity proportionately to the number of patients to be accommodated, and the site was approved of only after the assurance of the Committee appointed by the Corporation of the City to carry out the provisions of the Act, that it was impossible to procure a larger quantity of land at a reasonable price, within a convenient distance of Bristol. The Commissioners objected also to the extent of the site selected for the Carmarthen, Cardigan, and Pembroke Asylum. The space they considered was not sufficiently large for the number of patients to be provided for, and they remark—"Our experience has satisfied us that in no case should the land belonging to an asylum be less than in the proportion of one acre to four patients." The Committee of Visitors did not concur with the opinion of the Commissioners, and the purchase of the site was authorized by the Secretary of State, as there were pecuniary difficulties in the way of obtaining another.

During the erection of a new building for the accommodation of female patients at the Devon County Asylum, the experiment was tried of removing a number of female patients from the asylum to a

hired house at Exmouth, pending the erection of the building. The Commissioners report that this experiment "has proved entirely successful," and they add—

"Forty-two patients together have generally been accommodated, the individuals being changed from time to time; and the house was visited in the month of September by two members of our Board, who reported very favourably of the condition of the inmates. They found them well attended to, and comfortable in every respect. The alarm which had originally existed in the minds of the inhabitant of Exmouth, when it was first proposed to place the patients there, appeared to have entirely subsided. Although the majority of the patients were daily taken out in parties for walks by the shore, and in the neighbourhood, no inconvenience had in any case been felt; no individual was annoyed in any way; and, after a very short period, the patients themselves ceased to attract any unusual attention, being indeed soon considered as forming a part of the ordinary inhabitants of the town.

"It is to be hoped that the committees of other asylums may be induced to follow the example thus set by the Devonshire justices, now that so convincing a proof has been afforded of its practicability and success."

The Commissioners report upon the defective management of the Haverfordwest Asylum. It would seem that the hygienic condition of the buildings and the patients was highly and unnecessarily imperfect, and that measures of cruel restraint were from time to time had recourse to, no record of such measures being entered in the medical journal. Notwithstanding repeated remonstrances of the Commissioners, no improvement had taken place in the management of the asylum at their last visit in September, 1857, and in consequence, upon their recommendation, the medical officer was superseded. Several acts of cruelty to patients in one of the refractory wards of the Northampton Hospital for the Insane were also ascertained to have been committed by three of the attendants, upon an investigation of certain charges which had been brought to the knowledge of the Commissioners. The offenders were forthwith dismissed, the Commissioners having expressed the opinion that such a step was imperatively necessary.

It would seem that there is now an immediate prospect of a suitable site being obtained, and of the erection of an asylum without delay, for the City of London, the Aldermen having come to an arrangement with the Common Council in reference to questions of funds and rate.

In commenting upon the proposed enlargements of the Hanwell and Colney Hatch Asylums (in the former of which asylums additional accommodation is to be provided for 348 males and 362 females, in the latter for 365 males and 431 females), the Commissioners express their disapprobation of "the enlargement of these already overgrown establishments," and they remark upon the plans according to which the enlargement of the Colney Hatch Asylum is now being carried out, that,

"The most important suggestion made by us in reference to these plans was, that instead of so proposing to add new wards, constructed upon the very extensive design carried out in the original asylum, a distinct and separate building should be erected for the reception of quiet, convalescent, and work-

ing patients to the number of about 600, leaving only an addition of 200 to be accommodated in the main building. But to this proposition the Committee of Visitors declined to accede; and after a considerable amount of correspondence, the original plans were proceeded with, subject to various minor alterations and modifications in matters of detail suggested by ourselves and our consulting architect. In stating these circumstances, we are bound to add that all our experience only tends to strengthen the opinions we have formerly expressed upon this subject; and we feel well assured that, had our propositions been adopted, not only would the ratepayers of the county have been spared a very large outlay, but the patients themselves would have derived benefit from being lodged in rooms more cheerful, and better adapted to their previous habits, than the monotonous wards and galleries of the asylum. We think it right, therefore, as in the case of Hanwell, here to place on record the regret we feel that the Committee of Visitors of the Colney Hatch Asylum should have lost so favourable an opportunity of making efficient provision for a large portion of the pauper lunatics of the county of Middlesex, at a cost so much below what will be (and has hitherto been) incurred for this purpose."

In reference to the existing *Hospitals for the Insane*, the Commissioners express the opinion that the system of part-payment by the friends of the patient might be advantageously adopted to a greater extent than is at present the case, more especially in the Hospitals of St. Luke and Bethlehem; and they also state their regret that the Governors of Guy's Hospital should have decided to receive no more patients into the lunatic wards of that hospital, and should have come to the determination to close the wards altogether when the present inmates shall have died.

In the last Report of the Commissioners it was stated that the Government had determined to provide a new State Asylum for Criminal Lunatics. In pursuance of that determination 290 acres of land have been purchased, at the moderate cost of 6000*l.*, on Bagshot Heath, and the Commissioners report that the site is well fitted for the object to which it will be devoted.

The condition of *single patients* has engaged much of the Commissioners' attention during the past year, and they have been led to form an unfavourable opinion of the management and accommodation of these patients. "The lists have been carefully revised; regular returns from the persons having charge of patients have been strictly enforced; and the country has been divided into districts so as to insure the regular annual visitation of all cases returned to our office;" but the Commissioners state, that,

"On the whole, the condition of the patients so visited cannot be described as satisfactory. As a general rule, the accommodation provided is quite incommensurate with the payments, which in many instances are very large. The necessity for our continued and regular supervision has been clearly established, and in some instances we have found cases of marked neglect. In two or three we have discovered that, besides the patient who has been regularly certified and returned to this office, the proprietors of houses have also had under their charge other persons of unsound mind, relative to whom no return whatever had been made. In these cases, although, from the presence of circumstances of an extenuating character, we have not deemed it proper to institute prosecutions for the legal penalties incurred, we have insisted, by way of warning to others against commission of the same or any similar offence,

630 PRESENT STATE OF LUNACY IN ENGLAND AND WALES.

that the offenders should insert apologies in the daily and medical papers. In the majority of cases we have found that the provisions of the law as to the visitations by a second medical man, the keeping of a medical journal, and the annual and other returns to be made to our office, have been totally or partially neglected; and in every instance we have taken such steps as were necessary to secure in future a more strict compliance with the provisions of the law. Our experience on this head during the past year, in short, has confirmed the impression we have long entertained, that a very large number of insane persons are taken charge of by medical men and others without any legal authority; and, judging from the cases which have come to our knowledge, we have reason to fear that the condition of such patients, deprived as they are of all independent supervision, is far from satisfactory."

The Commissioners suggest an amendment in the Lunatic Asylums Act of 1853, in order to remove certain difficulties which exist in the provision of accommodation for pauper lunatics in boroughs; and the Report terminates with an Appendix containing several tables, from which the following statistics of lunacy are obtained:—

Return of Insane Persons confined in Asylums, Hospitals, and Licensed Houses on the 1st January, 1858.—Summary.

—	Private.			Pauper.			Total Males.	Total Females.	Total Lunatics.
	M.	F.	Total.	M.	F.	Total.			
Asylums	134	98	232	6,797	8,134	14,931	6,931	8,232	15,163
Hospitals	818	769	1,577	95	79	174	913	838	1,751
Metropolitan Licensed Houses }	676	630	1,306	490	827	1,317	1,106	1,457	2,623
Provincial Licensed Houses }	754	743	1,497	603	547	1,150	1,357	1,290	2,647
Royal Naval Hospital .	2,382	2,230	4,612	7,985	9,587	17,572	10,367	11,817	22,184
	126	—	126	—	—	—	126	—	126
	2,508	2,230	4,738	7,985	9,587	17,572	10,493	11,817	22,310

—	Found lunatic by inquisition.			Criminals.			Chargeable to Counties or Boroughs.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Asylums	10	2	12	224	79	303	590	664	1,254
Hospitals	18	13	31	98	20	118	—	—	—
Metropolitan Licensed Houses }	64	58	122	29	6	35	47	56	103
Provincial Licensed Houses }	79	51	130	139	38	177	57	76	133
Royal Naval Hospital .	171	124	295	490	143	633	694	796	1,490
	—	—	—	—	—	—	—	—	—
	171	124	295	490	143	633	694	796	1,490

Return of Admissions, Discharges, and Deaths of Patients of all Classes in Asylums, Hospitals, and Licensed Houses, during the year 1857.
—Summary.

	No. of Patients 1st Jan., 1857.		Admissions during 1857.		Discharges during 1857.				Deaths during 1857.						Patients remaining 1st Jan., 1858.			
					Total number.		Number recovered.		Total number.		From suicide.		From accident or violence.		Total number.		Number deemed curable.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
County and Borough Asylums	6570	7825	2394	2397	1149	1349	843	1011	871	667	5	2	6	3	6914	8211	839	990
Hospitals	907	826	382	408	308	336	140	193	65	47	—	—	1	—	912	839	82	116
Metropolitan Licensed Houses	1125	1451	523	548	326	414	125	173	169	116	2	—	—	—	1167	1458	135	190
Provincial Licensed Houses	1360	1173	606	647	496	468	185	189	136	84	4	1	2	—	1353	1280	199	232

REVIEWS

On Epilepsy and Epileptiform Seizures: their Causes, Pathology, and Treatment. By EDWARD HENRY SIEVEKING, M.D., Physician to St. Mary's Hospital, &c. (Churchill, 1858.)

THAT dire disease which ever and anon suspends reason and convulses the frame—which strikes with the suddenness of lightning and with the awfulness of unseen power, has always been a subject of intense interest to the medical inquirer. The psychological physician especially has been impelled to study it for two reasons. First, on account of the intimate etiological connexion of epilepsy with mental alienation; secondly, because a large proportion of the victims of this disease, driven from society, become permanent burdens upon the public and private asylums. He is moved by the spirit of philosophical investigation to inquire into the pathology of epilepsy; and stimulated by the practical necessity of governing a body of epileptics to seek the means of alleviating or of curing the disease. Accordingly, we find that some of the most elaborate and valuable treatises on epilepsy have emanated from special psychologists. It is certainly not our desire to detract one iota from the sterling merit or usefulness of such contributions as those of Esquirol, Delasiauve, or Cazauviel. But it may be permitted to us to welcome with cordiality and satisfaction the work of a general physician who has studied the disease from a point of view distinct from that of the psychological specialist. There is a peculiar advantage in carrying back our inquiries into the etiology and patho-

logy of epilepsy to the epochs which stand nearest in time to the origin of the disease.

The general physician stands in a position to do this. He witnesses all those earlier phenomena which attend and usher in the outbreak of the malady. He sees its growth, and he is able to watch the circumstances which, for good or for evil, modify its progress. The testimony of the general physician is necessary to complete the history. He alone in fact can read the first chapters, without which the subsequent ones, written in the lunatic asylum, must remain imperfect, unintelligible, and unprofitable.

This consideration would alone be sufficient to give value to the work of Dr. Sieveking. But those who may peruse his work will not fail to acknowledge that its value is enhanced by the excellent qualities which have enabled him to turn his special advantages to the best account. The work extends over 267 pages of small octavo. Not only on account of its moderate bulk, but also from the mass of valuable matter and judicious reflections it contains, Dr. Sieveking's book will be generally studied by the profession. It is not, therefore, necessary to enter into any lengthened analysis. It will be sufficient if we call prominent attention to the leading points which the author has more particularly illustrated.

Dr. Sieveking deprecates exclusive regard to the paroxysm as constituting the essence of epilepsy. He agrees with Dr. Watson in objecting to definitions of epilepsy, because its forms are so various, and its modifications so numerous, that no description can be given of it. He inclines to think that our knowledge of the disease will not gain by such definitions, as they tend to limit the attention to the paroxysm, and often mislead the observer, by inducing him to overlook conditions to which the definition does not apply, but which will appear, after a further examination of the whole subject, to belong to the same category of diseased conditions as epilepsy. We concur with the author thus far, that we should be keeping out of sight important etiological and pathological conditions if we restricted our investigations to the paroxysm itself. By losing sight of these conditions we should also vastly diminish the guides to curative or preventive treatment. Yet the study of the paroxysm is replete with physiological interest, and we will add, with promise of useful therapeutical application. The brilliant light which Brown-Séquard is throwing upon the functions of the nervous system, will probably before long clear up the mystery of the immediate cause of the epileptic seizure. When we shall have attained this point, an immense gain will have been made. The remarkable, we may say the cardinal, experiments of this far-sighted physiologist tend to define more closely the individuality of the function of the various parts of the nervous system. There can be no doubt that the epileptic seizure depends primarily upon a particular condition of a particular part, perhaps a very small part, of the nervous centres. It will be by the careful comparison of Nature's experiments upon the human subject with the physiologist's experiments upon the lower animals, that we shall one day demonstrate the essence of the epileptic paroxysm. It must, moreover, not be forgotten that the physiological analysis of the epileptic paroxysm has already led Marshall Hall to the discovery of

the means of cutting-off one of the most disastrous elements of the paroxysms, and thus of making one grand step on the road towards its total abolition. We do not fully assent to the truth of the flowery metaphor of Dr. Sieveking, and "regard the fit as (simply) the flower of a noxious weed." We rather regard the fit as the essence of the disease; but that, like many other diseases, the fit may be produced by a variety of causes. Many roads may lead to the same goal. But difference in the mode of production and variation in the route do not change the identity of the result. For these reasons we would continue to fasten our attention upon the fit as the foremost object of study; not, be it well understood, neglecting the close observation of those conditions which precede and determine its outbreak.

In discussing the paroxysms, Dr. Sieveking appears to question their subjection to the law of periodicity. He says:—

"Neither in my own observations, nor in the histories of the disease preserved by other authors, has there appeared to be any uniformity in the mode in which the paroxysms took place. In many, granted even the majority of cases, no regularity of return can be detected. But certainly our own observation affords distinct examples of periodicity. A young gentleman, destined for the Dutch navy, was seized with his first epileptic paroxysm on board-ship; a second occurred just one month, less twenty-four hours, after; he noted this interval, and being sent to London to be placed under our care, declared his expectation that another attack would occur after the like interval. He was domiciled in our own house. A fit of a severe character, lasting nearly an hour, seized him at the very moment he had predicated. On the return of the next period, the ruse was resorted to of putting the clock forwards; nevertheless, and although he was cheerful up to the moment, not apparently meditating the attack, he was suddenly arrested in an occupation which appeared to engross his mind, and at a time when he had reason to believe his hour was past, by the paroxysm. This periodicity exhibited itself on other occasions. It was never disturbed until he was altogether cured, an event which took place in a few months. Again, a gentleman engaged in an arduous commercial pursuit was subject to a cataleptic suspension of consciousness, the *petit mal*, every Sunday. It occasionally attacked him at other times, but on the Sunday it never failed until he was put under treatment. Again, we have now under our care a sailor, in an institution, where constant observation is exercised, who has three several times had a fit at as nearly as possible intervals of thirty days. We might multiply such examples. We cannot therefore doubt the fact of a periodical tendency. We even see in this tendency an important element towards the pathological elucidation of the disease."

Some excellent chapters follow on the phenomena and causes of epilepsy. The pathological anatomy is treated with especial care. The author dwells particularly on the observations of Dr. Boyd, which show an increased weight of brain in epileptics; he analyses at some length the less known researches of Wenzel, who seeks to place the pathological seat of epilepsy in the pituitary body and pineal gland. He does justice to this observer by correcting a misapprehension which has attached to his views; he repeats the warning before pointed out by Dr. Sims, not to confound, as has been done, the *cerebellum* with the pituitary body; this error he conjectures to have arisen from the use of the French translation of Wenzel, which gives the title "*Cervelet*" for "*Hirnanhang*." Dr. Sieveking, although considering the bearing of

disease of the pituitary body upon epilepsy, like that of Addison's disease to the bronzing of the skin, as a moot point, yet attaches great importance to the completeness and accuracy of Wenzel's twenty autopsies of epileptics. He gives a summary of each case.

The chapter on the theory of epilepsy is well deserving of attention. Dr. Sieveking's mode of discussing the value of different facts and hypotheses is eminently philosophical. His appreciation is that of a calm, reflective, and unprejudiced critic. He believes that in the great majority of instances of epilepsy, the first attack is due to an irritation produced by derangement in the amount or quality of the blood circulating in the brain. In a person predisposed we frequently find over-fatigue, a long walk, carrying heavy loads, or prolonged mental exertion, the manifest cause not only of the first, but of many succeeding seizures. Hence there will be occasion, in discussing the treatment of the disease, to dwell much upon the necessity of bodily and mental rest, so as to allow the system to recover that balance the disturbance of which gave rise to the seizure.

The two concluding chapters are devoted to the treatment of epilepsy. They exhibit, equally with the preceding ones, the quiet sagacity and excellent judgment of the author. Consistently with his view, that the general condition of the patient rather than the paroxysm should be regarded, he points out the special importance of treating the patient for the intervallic phenomena. It is here, again, that the experience of the general physician is useful in correcting or completing the experience of the psychiatric specialist. Esquirol has declared an absolute scepticism as to the influence of remedies. But the remark of Dr. Sieveking is true, that a lunatic asylum is generally made the ultimate resort of epileptic patients in whom the usual remedies have been exhausted, and in whom incipient mental fatuity has already indicated organic intra-cranial lesion. The experience of Dr. Sieveking certainly agrees with our own, namely, that medicine, taking a large view of the term, is capable of effecting much. "If I were to formularize" (says Dr. Sieveking) "the prevailing mode of treatment which I myself adopt, I should say it consisted in local derivation, or counter-irritation directed against cerebral congestion, and in general roborants or tonics." Of the presumed specific remedies he is disposed to place the preparations of iron and zinc first. Of zinc he would speak very favourably; he prefers the soluble sulphate to the oxide. He was probably unacquainted with the diphosphate, the preparation recently introduced by Dr. Barnes, and recommended by arguments deserving of attention. This skillful practitioner observes, that the combination of zinc with phosphorus seems particularly indicated by the expenditure of phosphorus in brain labour, by the prevalence of phosphorus in grain and many important articles of food; and by the system tolerating better the phosphate than the sulphate. If the object be to get more zinc into the system, phosphoric acid is the better vehicle. In many cases, Dr. Barnes' combination of diphosphate of zinc, quinine, and valerian seems to be especially promising. He speaks slightlyingly, and our experience agrees with his, of indigo and cotyledon umbilicus.

Passing from specific remedies, Dr. Sieveking dwells with much

s on the influence of moral and hygienic treatment. The cold especially extolled.

book concludes with a tabular summary of fifty-six cases l by the author. Our notice must conclude with the expres- our thankfulness for so valuable a contribution to the patho- d treatment of this obscure and intractable disease.

ual of Psychological Medicine. By JOHN CHAS. BUCKNILL, M.D., and D. H. TUKE, M.D. 1858.

unt of some systematic work to which the student and prac- might refer for information on the varied questions involved diagnosis, treatment, and general management of insanity has been felt, that we hail with peculiar satisfaction the appearance *Manual of Psychological Medicine*," by Drs. Bucknill and Tuke, whom are sufficiently known to the profession to warrant us cting much from their joint labours.

work before us is divided into two portions, the first embracing tory, classification, statistics of insanity, is from the pen of Dr. the remaining chapters, which treat of the diagnosis, pathology, atment of mental disorders, are by Dr. Bucknill.

space will not allow us to do more than briefly refer to some of re important features of this excellent work.

first two chapters are devoted to the history of insanity and its ent as known to the ancients, in which the author displays an ve acquaintance with the medical writings of antiquity, and y facility in selecting the leading features in these writings, cannot fail to render this portion of the work interesting to those gard an acquaintance with the progress of opinion as of impor- to the psychological physician. These are followed by one on a civilization in its bearings on insanity—a subject in itself inexhaustible, yet, nevertheless, of paramount importance, to the t of psychology, if he wish to render himself familiar with the ce which the ever-changing circumstances in which society is exercise in the production and modification of insanity. A nowledge of the varied phenomena of insanity can only be ob- by patient and careful observation of man, his habits and pecu- s as he exists in general society, aided by the more limited but y important observation of the various manifestations of disor- intellect as they are presented within the walls of an asylum. lienist who limits his attention to the condition of the human as it manifests itself in hospitals for the insane can have but a mperfect acquaintance with those nicer shades of mental distur- by which sanity slides into insanity, and the moral and respon- man passes into the irresponsible maniac. To the physician ed in the investigation of disorders of the mind, no subject which ven in the remotest degree, exercise an influence on the social or condition of man, is without interest. The varied forms of l disease, when viewed in large groups, have invariably been to be modified by the prevailing social condition of the time, and

we are satisfied that nothing tends so much to advance our knowledge of psychological medicine as the habit of taking a wide and comprehensive view of the various social conditions which, even in a remote degree, tend to develop insanity. This the author has done to the fullest extent in the present chapter, which is replete with important facts and valuable deductions. Dr. Tuke frankly contrasts the opposite conditions of barbarous and civilized life, and draws what seems to us a necessary conclusion, however repugnant it may be to our notions of modern civilization, in the following paragraph:—

“What can be a greater contrast than that which is presented by the untutored savage, on the one hand, and the member of a civilized community, on the other? The former passes his time chiefly in the open air, engaged in hunting and other pursuits, requiring much physical and but little mental exertion; never exhausts his brain by thinking, suffers very slightly from grief and sorrow, and knows little of the anxieties and sufferings connected with poverty. The latter, very generally, is obliged daily to infringe, more or less, the laws of health. He is subjected to the ‘steady, soaking intoxication of habitual over-work.’ If the brain demands rest, that rest is denied, and the brain perhaps goaded on by alcoholic stimulants. The very same person is possibly also the subject of ever-present anxiety and apprehension, in consequence of a precarious income. In a highly civilized community, the highest standard of intellectual attainment is constantly presented to the aspirations of its members; and minds, without reference to calibre, promiscuously enter the lists of an unequal contest. From these and other points of difference do we rashly draw the conclusion, that there are reasons for expecting a greater susceptibility to mental disorders among the civilized than the uncivilized nations of the world?”

Our limits will not allow us to consider this subject further; closely connected with which is that of the condition of the insane in modern times, on which the author bestows a chapter giving a succinct account of the change which has taken place in the management of the insane during the present century. On the subject of the classification of the different forms of mental disorder, Dr. Tuke, after a brief sketch of the various classifications of insanity adopted by different authors, submits the following modification, which, though imperfect, as all classifications must be until our knowledge of the pathology of insanity shall have been considerably extended, is perhaps, in the present state of our knowledge, as practically useful as any we could select, and conveys an approximative idea of the characters displayed by the leading types of mental disease.

“IDIOCY

DEMENTIA	{ Primary.
	{ Secondary.
DELUSIONAL INSANITY	{ Of a melancholy character.
	{ Of an exalted character.
	{ Of a destructive character.
	{ Melancholia without delusions.
EMOTIONAL INSANITY	{ Mania with general extravagance of conduct
	{ ('moral insanity').
	{ Mania with disposition to homicide.
	{ Mania with disposition to suicide.
	{ Mania with disposition to theft, &c., &c.

mental decay. Vicious indulgences of every kind induce a proclivity to mental disease; but who can say how often these are but the first faint mutterings of the storm? The valuable work of Dr. B. A. Morel will lead us to look to those wide-spread social evils which result in the physical and moral degradation of a people, as a fertile source from whence both our criminal and insane population are augmented. Pauperism, and its attendant evils of filth and imperfect sanitary arrangements, play sad havoc with the mental powers of the lower orders, especially in large towns. The feeble parent begets a feeble offspring, who, born to all the miseries of poverty, sinks still lower in the scale of humanity; and thus pauperism becomes hereditary, and crime almost the only refuge for the man whose feeble mental and physical organization renders him unfit to compete in the battle of life with the healthy and robust. Thus through poverty do the causes of decay become cumulative, and our asylums become filled with unhappy imbeciles, the produce of our social condition. These questions perhaps belong to the political economist more than the medical man; yet they are of vital consequence to the alienist who seeks for the true cause of many of the diseases he has to treat. With this notice we must take leave of Dr. Tuke, to notice the important contributions to the work by his colleague.

Dr. Bucknill is so favourably known to the profession by his valuable contributions to psychological medicine, that it is scarcely necessary to do more, in noticing the portion of the work before us which he has contributed, than to say that it fully sustains the reputation he has already earned as a sound and comprehensive writer in everything pertaining to the insane.

The following paragraph from the chapter on the diagnosis of insanity, so fully indicates what we believe to be the qualities requisite for the investigation, that we cannot forbear quoting it as an example of the comprehensive view which our author takes of his subject:—

“The physician is compelled to bring to the investigation” (the diagnosis of insanity) “not only a knowledge of those functions which are subservient to the vegetative and animal life of the individual, but also a clear and analytical conception of those which collectively constitute mind. He must not only be a physician but a metaphysician; not, indeed, in the almost opprobrious sense of the term, but in that better sense which designates a lover of truth seeking to ascertain not the cause of mind or any other unattainable abstraction, but the laws of mind, which are as regular as any other natural laws, and the knowledge of which offers to philosophy a wholesome and legitimate object of research.”

The whole chapter is admirably written, bearing the stamp of originality, and a perfect familiarity with the subject in all its bearings; free from vain speculations and hypotheses on the one hand, or a narrow dogmatism on the other. The maxims it contains may be followed as a safe and practical guide to the investigation of this subject, which forms perhaps the most anxious duty of the alienist. The author has paid considerable attention to the physiognomy of insanity. The varied appearances presented in the facial expression of the insane

form one of the most important aids in the diagnosis of the disease, and to the skilful physician are frequently alone sufficient to guide his inquiries to the true nature of the malady. In the detection of feigned insanity, to which the concluding portion of the chapter is devoted, a knowledge of the facial expression of the different forms of mental disease is of much importance. Few men, unless possessed of extraordinary histrionic talent, and a familiarity with the insane, can at once and for a length of time copy not only the manners but also the expression of disease. In disease the expression of countenance is involuntary, requiring no effort of the will, whilst in the simulation this can only be sustained by the most constant effort; in feigned madness the patient is always anxious to convince bystanders of his insanity—an effort which, fortunately for psychology, few can sustain for any length of time. Dr. Bucknill has illustrated this subject with several important cases and much valuable criticism.

In the limits of a review it is impossible to notice even the leading features in the section devoted to the pathology of insanity; suffice it to say that throughout the author displays an acquaintance with all that is valuable in the writings of others on this obscure subject, and has brought to its investigation an extensive knowledge of the physiological science of the day. The following quotation will afford some idea of the grounds on which he endeavours to found a theory of mental pathology:—

“In default, therefore, of real knowledge respecting the conditions of nerve function, we must be satisfied with the recognition of the fact that the great organ of this function is subjected to the general laws of decay and reparation of animal tissues, and to some other laws having special reference to its own degeneration and repair.”

“It is upon this physiological basis only that, in default of more precise and extensive knowledge of the changes in the nerve-cell and the generation of nerve-force, cerebral pathology can be established.”

“The physiological principle upon which we have to build a system of cerebral pathology, is that mental health is dependent upon the due nutrition, stimulation, and repair of the brain; that is, upon the conditions of the exhaustion and reparation of its nerve substance being maintained in a healthy and regular state, and that mental disease results from the interruption or disturbance of these conditions.”

Having thus stated the principles on which to establish his pathology, our author takes the following broad view of the organic conditions which lead to the production of insanity:—

“The brain, like every other organ of the body, for the perfect performance of its functions requires the perfect condition of its organization and its freedom from all pathological states whatever. Consequently, the existence of any pathological state in the organ of the mind will interrupt the functions of that organ, and produce a greater or less amount of disease of mind—that, is, insanity.”

How far the principles thus enunciated are sustained by the arguments of the author, we must leave his readers to judge; at all events, he has brought to their elucidation much sound reasoning, and a full

appreciation of the importance of cerebral physiology in its bearings on the questions at issue.

The concluding chapter is occupied with the treatment of insanity, and embraces a full and comprehensive estimate of the relative value of the different medicinal remedies recommended by various writers.

The author speaks highly of the use of small doses of antimony in some forms of mania, not given with the view of producing nausea or depression. Of the value of this mode of treatment in the cases referred to by the author, we can bear the testimony of our own experience.

Opium, Dr. Bucknill, in common with most practitioners, regards as a valuable remedy in various forms of insanity, when selected with a due regard to their pathological condition.

The general or moral management of the insane recommended by the author is based upon the broad and liberal views entertained by most enlightened physicians of the present day. The insane are amenable to all the good influences of a well-regulated household as any other portion of the community. Order, regularity, the judicious combination of firmness with kindness, and the force of example, are with the man of unsound mind, equally with the sane, the most powerful means of bringing him under control. A kind word and gentle persuasion will do more to calm the unruly than harsh and violent treatment.

To the physician and the philanthropist, the interior of an asylum having all the adjuncts of a comfortable house, and its inmates living together on terms of intimacy and kindness, must be a far more pleasing spectacle than the chains and bars of former days. In conclusion, we can confidently recommend this work to our readers as one of the best treatises on the subject in the English language. Throughout it bears the evidence of much careful study and accurate observation, which cannot fail to obtain for its authors an increased reputation.

FOREIGN PSYCHOLOGICAL LITERATURE.

Our quarterly *resumé* of Foreign Psychological Literature will embrace an analysis of the following interesting subjects:—

1. On the Physical Symptoms of Insanity.
2. On the Responsibility of the Deaf and Dumb.
3. Singular Case of Insanity. Cysticerci in the Brain.
4. Pathological Anatomy of the Obliteration and Aberration of the Relative Functions.
5. Case of Sporadic Cretinism.
6. Somnambulism and extraordinary Neuroses generally.
7. On Disordered Sentiments and Affections.
8. Case of Mania with Homicidal Tendency.
9. On the Pathogenic Influence of Loss of Sleep.

On the Physical Symptoms of Insanity. By M. SAUZE.

M. SAUZE is of opinion that the physical symptoms of mental aberration have been much neglected, and agrees with M. Aubanel that if we could always observe the patient accurately, or if we could receive a trustworthy account from him of all his sensations, we should generally find irrefragable proof that *some organic change* is taking place in the brain of the person about to become insane. "Some *alienistes* only see in insanity an intellectual disorder independent of any material lesion. This is a grave error, which must lead to serious consequences. It would lead us to neglect the physical signs which *constantly* precede, and which accompany the outbreak of different mental affections; and which are the source of most valuable indications. Insanity is not a *malady* independent of organization. Although, as M. Leuret says, we are completely ignorant of the nature of the cerebral alteration, it is not the less true that this alteration does exist. Between the cause which produces the derangement, and its actual outbreak, there passes a series of phenomena, *constant and invariable*, which indicate with certainty that the organization participates in the production of the mental phenomena. We have never seen these physical signs wanting."

Before the delirium commences, there exists physical derangement, the importance of which is often overlooked. There is headache, and spinal sensations, such as of compressing or *tearing* the head—of emptiness or cold in the cranium. At the same time there is obstinate insomnia, which gradually undermines the strength. The digestive functions present noteworthy irregularities,—there is loss of appetite and constipation—the tongue is white and thickly furred. The general sensibility is modified by vague pains in the limbs; the mobility by spasms and tremblings: at the same time the intellectual and moral nature continues intact. "If you add to these symptoms, the flushing and heat of face, and the injection of the eyes, you can only see in this array of physical phenomena the symptomatic expression of a pathological change in the brain." Sometimes there is a true febrile action. The skin is hot, the pulse frequent and full, the tongue white, and the limbs painful; and the condition is mistaken for that of ephemeral fever.

At other times we may notice a state of dulness or somnolence which precedes the outbreak of the delirium. The patients have not their ordinary activity; they sleep often without any fatigue to account for the tendency. Sometimes they complain of heat in the head, and experience momentary relief from cold and wet applications. (An illustrative case is given in which these last symptoms continued for six months before the disorder of the intellect appeared.)

"This initial period of insanity, which has been designated as the *period of incubation*, is *constant*. It is observed generally on the *début* of monomania, of mania, of paralytic insanity, and of stupidity or dementia: the physical symptoms are the same; the duration variable, from a few days to several months." These symptoms, likewise, continue after the actual accession of the mental disorder; but

if overlooked before, they are still more likely to be so now, when other phenomena of so marked a character have appeared. "If, however, we cannot always trace them, we must not too hastily conclude that they do not exist; they are often only marked by agitation and delirious ideas; and whenever calmness and lucidity supervene, we can always detect incontestable traces of the physical disorder." It is not infrequent to observe at the cessation of the delirium, the same train of physical symptoms as those which preceded and attended the outbreak. The case given as illustrative of this position is interesting. A female, aged fifty-two, had disturbed sleep, and symptoms of lumbago; also headache, excessive weariness, fever, and gastric derangement. In about a month agitation and delirium supervened. She was subject to continual fears, heard divers noises, and voices which said unpleasant things. The treatment was exclusively physical, and lasted three months; the cure was complete; but at the decline of the malady, when the delirium disappeared, the affections of the head and stomach reappeared for a certain period.

"Experience tells me that a cure is not to be looked upon as solid and durable until these remaining physical symptoms disappear. Baths in the evening, purgatives, and local evacuations of blood, have given me the best results in these cases." M. Sauze views these bodily symptoms as more characteristic of the disease than even the mental disorder; for he observes that these latter are the first to disappear, and the last to be developed. These symptoms are clearly the expression of a cerebral affection, and appear to bespeak a "sort of state of irritation of the encephalon, a congestive or subinflammatory condition. Not that I would deduce from this necessarily the desirableness of a strictly antiphlogistic treatment in all cases; yet I think, judging from the results of my practice, that at the period of the *début* of the affection, some few applications of leeches to the anus or the mastoid regions, with purgatives and revulsives, will often be followed by favourable results." These remarks are not, however, to be applied to all cases; there are those in which the physical signs are those of depression and an anæmic, or cachectic state; then the treatment must be completely changed, and we must depend upon good nutriment, with iron and other tonics.

The conclusions of M. Sauze are as follows:—

1. Insanity is a cerebral affection, characterized by headache, sleeplessness, disorder of the general sensibility and the digestive functions, and by trouble of the intelligence.
2. The two orders of symptoms, physical and moral, are *equally* indispensable to characterize insanity. Every definition which would exclude either, would be incomplete, inexact, and would give a false idea of the malady.
3. Until our own times, insanity has scarcely been studied in any save its intellectual aspect: the physical symptoms have been mistaken and neglected.
4. The physical symptoms are especially manifest in the commencement; but they are manifest both during the course and in the decline. They always precede for some time the actual outbreak.

5. Insanity being a cerebral affection in all respects like any other organic malady, requires in like manner physical treatment.

6. This treatment ought to be applied *at the beginning*. *At this epoch insanity is almost always curable.*

7. Moral treatment must be considered only as an adjuvant—as the hygiene of the brain.

8. Insanity only becomes incurable because the proper physical treatment is neglected at the proper time.

9. The first origin of insanity is often connected with the various forms of degeneration of the human race, and with the existence of neuroses.

10. It is not sufficient to study only the treatment of insanity in its actual state. It is especially necessary to study the means of preventing it, and to establish the laws of prophylaxis.

[These views are highly important, both in themselves, and as emanating from such high authority. Yet we can scarcely accord that the physical aspect of insanity has been so entirely overlooked as is here presupposed, nor that this branch of the treatment has been so neglected. Recognising the necessity for the strictest attention to the physical treatment of the disease, we must not overlook, nor put too much in the background, that of a moral nature. Granting even that the bodily functions were *always* disordered, it cannot be forgotten that in many instances the affection is induced, proximately at least, by moral influences; and the force which has been powerful for evil may in many cases be counteracted, and its effects neutralized by the same order of forces, otherwise applied.]

On the Responsibility and Legal Relations of the Deaf and Dumb.

By DR. JENDRITZA. (*Zeitschrift*, Jan. 1858.)

S——, born deaf and dumb, now twenty years of age, of powerful constitution, was brought up without any education or instruction by his parents, poor country people, who supported themselves by day-labouring, and was from early youth made useful in many branches of their arduous occupation. As his bodily powers seemed completely developed when about seventeen years of age, he was fully employed then by his father in heavy work. After two years and a half of this, the father died, and the widow, fearing that she should not be able to support herself, only aided by the deaf and dumb son, took a situation which then offered itself; whilst a distant relative, N——, who kept a small inn in the country, became guardian to the son, and took him to assist in the hostelry. After some time N—— had much reason to be dissatisfied with him, partly on account of extreme laziness and awkwardness, which showed itself in many duties; and, on the other hand, on account of sudden ebullitions of anger after reproof or punishment, during which he would throw down anything with which he might be engaged, and run away.

On the 2nd of November, S—— was engaged in harnessing the horses to the wagon. One of the horses had only been for a short time so employed, and was every day very awkward about the harnessing

and resisted the attempts of S——, by jumping about, and lashing out his heels, so that S——'s wrath was roused, and he was soon engaged in a formal contest with the horse, and struck him violently and repeatedly. N——, hearing the uproar, looked out of his window, and was very angry on seeing the horse so ill-treated. He seized a stick, and rushing upon S——, he pulled him away, and struck him again and again. S——, still in the greatest excitement about the horse, was still further exasperated by the unexpected punishment. Smarting from the blows on his back, he turned to the wagon, and seizing one of the bars, he flew towards N——, threatening him with it. He, perceiving the intention of S——, had taken a few steps in retreat, calling loudly for help. But S—— speedily overtook him, and striking him on the head with the iron-bound bar, smashed in the skull, so that N—— fell dead at once, without a cry. Upon the call for help being heard, the maid-servant hastened to the scene, but only arrived in time to witness the completion of the murder; she saw the blow struck, and N—— fall. S—— threw away the bar, and fled across the fields. Examining more closely, the servant convinced herself that N—— was dead. Called together by her outcries, the neighbours arrived, and being informed of what had happened, they pursued S——, and soon brought him back and bound him. He was on the same day committed to legal custody.

On the first hearing he was convicted of the murder through the testimony of the girl, who understood how to communicate with him by signs, and informed him that she had been a witness of the blow. Afterwards his mother was employed as interpreter by the judge; and after speaking with him in his manner, alleged on his behalf, that for a long time he had been very much irritated against N—— by often repeated punishment; but immediately before the fatal blow, having been roused to fury by the unmanageable horse, he had been driven to perfectly uncontrollable rage by the severe punishment that followed, and wished at last to revenge a long series of injuries; but added that he did not intend to kill N——. Hereupon the judge requested an opinion as to the responsibility of the accused, which here follows:—

The deaf and dumb man, S——, cannot be viewed as a responsible person in respect of the manslaughter of the innkeeper N——, on account of being born deaf and dumb, and as the evidence shows, from not having received the least instruction or education.

In justification of this view, it is necessary to bear in mind the distinction between those deaf and dumb who are born without hearing, or lost it in early infancy before they had learned to speak; and those who had once possessed those faculties, and had lost them after the reception of some education. The former are truly the deaf-mutes; the latter may be called simply deaf and dumb. *These* have some responsibility in the eye of the law; but the former, inasmuch as for the comprehension of social and civil relations hearing is necessary, remain ever irresponsible. Such of these as have received no education, as is the case with S——, lack the faculty of communicating or exchanging ideas, except through the medium of certain signs. Even those who have received some degree of education must still be considered as

only endowed with a limited and relative responsibility; as, through the failure of hearing and speech, the development of the mind and soul must necessarily be imperfect.

This opinion is founded on the observation, that even in the best educated and most talented among the deaf-mutes, during their whole life traces remain of their former early condition, which are outwardly manifested by certain abnormal physical manifestations; and which remind the careful observer of conditions which were obvious at the earlier periods, before education commenced. Under the most complete system of education of the deaf and dumb, we must yet doubt whether they can arrive at any deep practical comprehension of right, obligation, duty, necessity, and ideas of the like nature. Again, all deaf-mutes, however educated, retain a persistent proclivity to sudden accessions of rage which are sometimes uncontrollable. Also all their passions and appetites are more strongly developed than in those of sound senses. Control of emotions and instinctive propensities cannot be taught in the same full and practical manner that the knowledge of physical objects, and even arts and sciences may be conveyed. For these and other reasons, the deaf and dumb cannot be compared as to responsibility with those of perfect senses; nor can they ever merit the full punishment of crime, the justice of which should involve a comprehension of moral relations of right and wrong, much deeper than that of the dog which fears and flees from the whip, and which it may still remain a matter of doubt whether the deaf and dumb comprehend.

Whilst the educated deaf-mutes only possess a relative and limited responsibility, those who, like S—, are utterly without any instruction, possess none whatever, and are merely in a state of nature. Such a man is of the lowest grade of humanity, and can be held as little higher than the beasts which perish. Without any consciousness except that of his natural inclinations, he wanders amongst men, incapable of communicating with them, and cannot, from sensuality, raise himself up to any idea of virtue.

S—, roused to anger by long ill-treatment, and immediately by the horse, and the punishment succeeding, committed an act which would be murder in one endowed with perfect senses. He thought not of the consequences nor of the meaning of the deed, but only obeyed the blind impulse to revenge his injuries. In the eye of science and of the law, he must be considered as irresponsible. His removal to an asylum for deaf-mutes is advised, in order to his receiving some education; and afterwards it is recommended that, to avoid future evil, he should be placed under competent surveillance.

Singular Case of Insanity. Cysticerci in the Brain. By Dr. CZERMACK.
(From the *Correspondenz-Blatt*.)

MARIA K—L, born in 1818, the third child of healthy parents, bodily and mentally normally developed, was in the condition of a useful servant for house and field work. She menstruated regularly

from her twelfth year. She was married at the age of twenty, and had three sons.

In the autumn of 1853, she complained of a violent pain at the crown of the head, and dragging and tearing pains in the left side of the face, and in the left arm and shoulder. There was no visible change in the painful localities. This affection was treated by various physicians for rheumatism, but without effect. The pains continued more or less violent for more than a year. She was during this time for the most part confined to her room and bed, and could not follow her usual avocations.

She was patient and composed during the most excruciating pains; but was sullen, impatient, and peevish *when the pains were relieved*. By degrees she complained less of pain, but grieved to be so long disabled; the consciousness of the necessity of looking after the house was a trouble to her. The gloomy aspect increased, and *the pains by little and little vanished entirely*. She withdrew from the family, would allow no one to trouble themselves about her, and took little nourishment—at times, none; if urged, she would grow angry.

She began to walk rapidly up and down her apartment, and to talk aloud to herself, gesticulating energetically. She began to complain of having brought all kinds of evil upon her family, and *upon the world at large*; she was the vilest of creatures, not fit to live. Her nights were for the most part sleepless.

One day she left her chamber and threw herself into some neighbouring water, but was taken out by her sons. She was then quiet a few hours, after which she flew at one of them, saying that she must kill him, that she herself might die. On this day, two years after the commencement of the pain, Dr. Czermack first saw her. (Here follows a description of her *personnel* and general aspect). The tongue was loaded, the respiration quickened, the pulse 120, and the general heat increased; food and drink were refused, the bowels were confined, but urine passed copiously. She took no notice of any questions, but screamed and talked incoherently. There often seemed to be a tendency to *rhyme* and *rhythm* in her expressions. She fought and bit constantly, and sleep was entirely absent. After six days these prominent symptoms disappeared; emaciation increased, the muscular system relaxed, the expression of the countenance became heavy and immovable, the eyes half closed, the pupils dilated, the reaction of the iris slow, the glance feeble and anxious, the tongue dry, the thirst increased, the pulse 70, the temperature of the body was diminished, the bowels confined, and the urine scanty. She complained of faintness and occasional vertigo; she felt very sad and depressed, and had a confused idea that she was "changed into another person."

She sat shrunk together in the darkest corner of the chamber; she trembled over the whole body if any one approached or spoke to her. She answered with feeble voice only such questions as related to her own condition, and took no notice of any other observations. Her movements were slow and uncertain. She only took food after much persuasion, but allowed herself readily to be washed and dressed.

In the course of about ten weeks, the countenance became smiling, but the glance staring; the right pupil was much dilated, and did not

answer to the stimulus of light; the left pupil was contracted, and did not dilate when light was withdrawn. The fibrillæ of the muscles of the body, face, and tongue trembled. The pulse was 96, the temperature of the head slightly raised; the emaciation was increased.

She remained in a corner of the chamber, and played with toys or pieces of wood; she replied to questions by a laugh, swallowed greedily her food, and attempted to make her wants known by loud inarticulate sounds. Her gait was uncertain, and she dragged the right foot slightly. She was indifferent to surrounding circumstances, and neglected cleanliness entirely.

This condition lasted two years, after which she died of pneumonia. These are the principal morbid changes found on examination forty-eight hours after death:—

The dura mater was tightly stretched, very much injected, and between it and the inner membranes was a large quantity of yellowish transparent serum. The inner membranes were dull and milky over the whole hemispheres, containing fluid, thickened, here and there injected, and easily separated from the substance of the brain.

On the inner surface of the pia mater, and between the convolutions were found fifty-seven clear roundish vesicles, twenty-nine as large as millet seeds, seventeen as large as peas, and eleven as large as beans. Each of these vesicles contained a worm-like entozoon (*Blasenschwanzwurm*). Most of these were on the right side, but some also on the left. The greater number by far were on the middle lobe. On this point some of the concluding observations of Dr. Czermack are noteworthy:—

“As, according to Professor Huschke, the central convolutions constitute the ‘point of indifference’ (*Indifferenz Punkt*) of the brain, and may, physiologically, be viewed as the ‘plastic expression of the soul’ (*für den plastischen Ausdruck der Seele*), and of self-consciousness; so we must regard this part of the brain as that especially affected in all cases of mental derangement. In all such cases, where the consciousness and personal disposition, and the sense of individuality (the *I*) is affected, there are always morbid changes in this locality. This observation has been confirmed by me, in conjunction with Director Köstl, by examinations made on many hundred cases of insanity, and I add it to the comments on the previous case, without going further into the detailed arguments.”

On the Pathological Anatomy of the Obliteration and Aberration of the Relative Functions. By M. FOLLET, M.D.

M. FOLLET, in the outset, points out forcibly the necessity for analysing well the morbid changes found in the brain, and the errors committed in too hastily concluding that these changes are the *cause* of the foregoing phenomena.

“After having demanded of these examinations what there may be palpable, tending to explain the derangement of the intelligence, we shall show that the alterations remarked in the membranes, or the substance of the brain, appear to us not as the first cause of the *discord* produced in the instrument, but as an effect of the degeneration consecutive to those morbid modifications which, in a latent and gradual manner, have troubled the equilibrium of the hemispheres

as to their innervation. It is time that this principle be recognised, and that the observer, because he has found here an inflamed membrane and there a softened patch, be not reduced to suppose that there is nothing beyond that; and, taking the effect for the cause, pass in silence the nervous disorder (*trouble*), which has from the beginning dominated over the vital powers. If, like the unknown quantity in a problem, this trouble is not in itself recognisable, it assuredly is so through the secondary alterations, which pass from the blood to the viscera, and affect in a tertiary manner the nutritive and assimilative functions, and so produce those morbid changes which, instead of being viewed as a result, are so often considered the primary cause of mental affections."

M. Follet weighs and measures each brain. In weighing, the cerebellum, the cerebrum, and each hemisphere are weighed separately. From this mode of examination, it has been shown that epilepsy coincides, with a difference of weight between the two hemispheres, the equality of which varies but little in the other types of alienation. In measuring, the thickness of the white matter, from the bottom of the convolutions to the surface of the ventricles, and the chord of the ventricular arch, are always taken—the latter measurement, in order to appreciate the dilatation of the ventricles. This has also brought to light an interesting fact—viz., that the thinning of the white substance is proportional to the degree of dilatation; and that this is a *vice of structure* inherent to congenital obliteration of the faculties, the conditions of which are more or less reproduced in all the forms of *acquired* obliteration. M. Follet considers the loss of equilibrium between the hemispheres as the point of departure of all mental pathology.

As to the cerebellum, "an organ quite independent of the cerebrum," we remark that, in middle age, its weight is correlative with the height of the subject; before twenty years of age, it is proportionally greater; after seventy years, much less.

M. Follet considers the alterations in the cranium and membranes to be produced in proportion as

"Under the membranes there is condensed an excess of *caloricity*, by the abnormal disengagement of that nervous influx, of which the rupture of the equilibrium between the hemispheres will be, sooner or later, admitted as the latent cause and primordial element in all mental affections. And by reason of the *solidarity* between the nervous and the vascular systems, it will be recognised that this inter-hemispheric disturbance, after a period of incubation, reacts upon the blood, which thence becomes elevated in temperature, and, acting upon the membranes, constitutes a state of *cerebral febricity*."

An action is also instituted upon the vessels themselves, sometimes obliterating them; and thence results the softening of the subjacent tissue. Much of M. Follet's analysis of the changes of the membranes (in which nothing particularly new appears) is devoted to proving that those changes are only secondary.

On the alterations in the brain-substance, M. Follet holds the same opinions:—

"Having shown that the changes in the membranes are an *effect*, not *cause* of the mental alienation, we add that the same is the case as to the brain itself. It is in the inner structure of the brain, serving for the manifestations of the soul, in the secret and mysterious play of that nervous influx, in the disturbance

of its equilibrium, that we must look for the essential cause of the trouble which grows and progresses in the relative life. The nervous and sanguine elements are so intimately connected, that if the first *oscillates*, the second participates in the febrile state; and it is only after a series of actions and reactions between these two powers, that first the pia mater, and afterwards the other membranes, become affected; and that, under the influence of this physical aggravation, atrophy and softening of the brain substance takes place."

M. Follet has no hesitation in considering the white matter of the brain as the seat or organ of attention and memory; and its thickness varies inversely as the dilatation of the lateral ventricles, as measured by the chord of their arc.

The general conclusions from several hundred examinations are as follows:—

1. Obliteration of the relative faculties is incurable, whether congenital (idiocy) or acquired (dementia). General or partial aberration is susceptible of cure, if treated in time.

2. All subjects that have preserved any intellectual aptitude, have presented a thickness of white matter of from 10 to 15 millimetres (about $\frac{1}{2}$ to $\frac{3}{4}$ an inch), and the chord of the ventricular arc has presented a medium of about 10 centimetres (nearly $1\frac{1}{2}$ inch). During life we have the exact condition of idiots, imbeciles, and the demented, defined by the amount of attention and memory; and these psychopathic lesions are in strict relation to the thinness of the white matter and the dilatation of the ventricles. There is always by so much the more loss of memory and general intellectual enfeeblement, as the thickness of the white matter declines below 5 millimetres and the ventricular chord exceeds 10 centimetres. These observations bring us to the conclusion that the attention, which is the generative principle of the ideas, and the memory, are inherent to the white matter, which seems to us not to be a simple conducting substance, but the centre of reflection and the common seat of memory—the source of our intuitive impressions, whence arise our metaphysical ideas.

3. The absolute weight of the encephalic mass does not correspond with intellectual power or adaptability. Were it so, the idiot would sometimes take first rank. The structural conditions with which intellect seems to correspond are—

- A. The development of the anterior lobes.
- B. The symmetry of the convolutions, giving extended surface to the cortical matter, the seat of sensibility, of intelligence, and of will.
- C. The thickness of the white matter—the seat of memory.
- D. The narrowness of the lateral ventricles.
- E. The equality of structure and of weight in the cerebral hemispheres, conducing to the equilibrium of their innervation.

4. The cause, the march, the complications, and the degeneration of mental aberration may be thus formulated:—

- A. Interhemispheric nervous disturbance of equilibrium (from moral or physical causes) acting at first in a latent manner. At this period peculiarities of manner, character, or actions show themselves.

- B. A febrile state, consecutive to this breach of equilibrium. This is the period of illusions, hallucinations, and increase of delirium.
- C. An inflammatory condition of the pia mater, frequently terminating in death.
- D. A chronic form, in which the capillaries of the pia mater are obliterated, and the brain-tissue begins to be atrophied.
- E. There may arise a corresponding pathological condition of thorax or abdomen, which dissolves the vital unity.
- F. The cerebral innervation is lowered, relative life is obliterated, and physical life is extinguished in general progressive paralysis.

5. Epileptic attacks repeated often in the day may correspond with a difference in the weight of the hemispheres to the extent of 200 grammes (nearly 7 ounces). These frightful attacks are due to a loss of equilibrium in the innervation of the hemispheres. If the attacks are very distant from each other, there is occasionally great danger of a catastrophe. We have just lost an epileptic patient from apoplexy, who for six months had appeared to be in the way of recovery.

M. Follet indulges in a little theory, upon which, however, he does not dwell, that the grey matter is but the superficial expansion of the white substance, tinged by the constant contact of the nervous fluid, which is, as it were, insulated under the membranes.

The practical suggestions resolve themselves into one or two very important points. Idiocy and dementia are *incurable*; but there is reason to hope that the acute aberrations, whether continued or intermittent, may in time be as amenable to successful treatment as any other diseases, provided always, and above all other considerations, that appropriate treatment be adopted *at a sufficiently early period*. M. Follet speaks most highly of influencing the blood through the *ingesta*, and so acting indirectly upon the innervation. Temperature also has a mighty influence in calming excitement amongst the direct modes of acting upon the innervation. M. Follet speaks most favourably of the pyrophosphate of iron and soda, which, he says, appears to act most powerfully upon the blood and the nervous element.

Case of Sporadic Cretinism.

M. BAILLARGER introduced during the year 1857 to the *Société Médico-Psychologique* a cretinous girl, with remarks, from which the following are abstracted:—

"You know, Messieurs, the differences which I have held to be established between cretinism and idiocy. Cretinism is, according to my views, an arrest of development of the entire organism. Endemic idiocy is characterized, on the contrary, by an arrest of development of the intelligence, which establishes a well-marked difference between these affections. I have just met with a very remarkable case of sporadic cretinism:—It is a girl, born at Melun, of healthy and well-formed parents. She presented no peculiarity at birth; she began to walk at fifteen months, and at this epoch she had not a more voluminous head than children at that age generally, nor any other distinctive marks. The first dentition was completed at three years of age, and it was then that the general development was arrested.

"The girl is now about twenty-seven, and she has the intelligence and tastes of a child of four or five; she plays with a doll, and has no sentiments of modesty. It is in vain to attempt any education, she could never learn to read, and can scarcely count twenty. Speech is easy and pronunciation clear, but the voice is nasal. Her height is about three feet, the head is elongated and flattened at the sides, the palatine arch is high and prolonged, the tongue is thick. The features recall in all points those which we assign to cretinism; the nose is flat, the mouth large, and the lips thick. The body is fat, the limbs thick and short, and sufficiently regular. The second dentition only commenced at eighteen years of age, and has not yet terminated. The pubis is smooth, the mammary glands rudimentary; menstruation has not been established, and there has never been any sexual sensation.

"It seems to me that, in an anthropologic point of view, there is much interest in studying those types which prove that in the human race there are beings that cannot attain complete development. But I wish to submit to the Society an idea which has occurred to me in connexion with this individual case. This girl presents an extraordinary polysarcia. I have before seen in Paris, with M. Rayer, a little girl who had the same formation; I have also remarked in the Pyrenees, the extreme obesity of certain cretins. I have considered whether there is not a relation between the general condition of these arrested organisms and that of those submitted early to castration. The description which M. Virey gives of eunuchs, is this:—'Softness, paleness, and flaccidity of the flesh; relaxation of the cellular tissue, great development of the lymphatic and glandular system, absence of hairy appendages, soft and relaxed abdomen, large thighs; the legs swelled, moisture predominating in all the tissues, appearing old and decrepid early, little heat of skin—hence the name of *frigidi* given to eunuchs.'

"In reference to this last fact I have one more relation to notice: the mother of this girl has informed me that she has a great tendency to coldness, and that in winter she has to leave her almost entirely in bed, on account of her being so cold. The picture which M. Virey draws of eunuchs, and what we see of cretinism, authorizes then some relation; and I believe that we may entertain the idea that the polysarcia is due to the absence of menstruation, and the inactivity generally of the generative organs."

M. Baillarger afterwards explained that this *only* related to the polysarcia, and not to the general condition of arrest of development—the polysarcia he believed to be a subsequent effect. Further, idiots and imbeciles have generally the sexual organs well-developed, and these have the reputation of being salacious. Idiocy and imbecility are characterized by arrest of the intelligence; but in cretins the generative organs are little developed, or are large, soft, flaccid, infiltrated, and without any kind of power—in a word, they are undeveloped or imperfect. As to the general state, it is due to a special cause, to which also must be referred the arrest of development of the genital organs, in the same manner as arrest of development of the stature, and of dentition, &c.

M. Ferrus, commenting on this case, did not in all points agree with M. Baillarger, not considering the portrait drawn by him represented truly the cretin type. He continued—

"M. Baillarger has expressed formally the opinion that the arrest of development in its essence attacks especially the generative apparatus, the organs of which are soft, flabby, infiltrated, and powerless. I consider that this apparatus possesses more power than is here attributed to it. I have seen cretins have

powerful erections; and indeed it could not be otherwise, inasmuch as the great scourge of those countries where cretinism is rife, is that cretins beget cretins. Fodéré has fully shown that cretinism perpetuates itself in a great number of families. As to the simultaneous existence of idiots and cretins in the same locality, we cannot deny that where cretinism is endemic, there are idiots and imbeciles arrested in development, but here cretins are the rule and idiots the exception."

M. Morel agreed so far with M. Baillarger as to grant the accordance between eunuchs and cretins as stated by him, but guarded against the supposition that all those who are affected by sterility or infecundity, are related to either of these unfortunate classes. Many of them are incapable of propagating the species in the normal state, in accordance with the laws developed in the treatise on the "Degenerations of the Human Race." These degenerate beings are distinguished by short stature, bad formation of the head, and often of the thorax; incomplete or tardy development of puberty, and sometimes by complete inability to procreate. In spite of this latter fact, they are far from presenting the peculiar type of cretins or eunuchs. M. Morel believed that the characters of these degenerations are so marked, that the time will come when, by mere inspection of the subject, we shall be enabled to refer each form of degeneration to its specific cause.

Somnambulism and Extraordinary Neuroses generally.

By M. GARNIER and M. FERRUS.

ON the 25th of May, 1857, a discussion took place before the *Société Médico-Psychologique*, in reference to a case recited by M. Cerise, and to "extraordinary neuroses" generally, which involved questions concerning somnambulism, natural and artificial, and magnetism. We purpose giving a full abstract of the proceedings of this meeting, to indicate the state of feeling of our continental brethren on these vexed questions. M. Garnier spoke first:—

"M. Cerise had related the experience of M. Puel on a patient affected with catalepsy. During the period of the accession, the patient at first suffered much from the application of the hand, but afterwards became accustomed to it; and then to friction, which, at first painful, became ultimately salutary. Frictions too difficult to repeat or prolong, were replaced by applications of cold water, which began by exasperating the patient, and ended by calming her. It seemed to result from these facts—that the remedy was effective as soon as the patient was accustomed to it, or had confidence in it. The experience of M. Cerise showed that the pointing of his cane towards an organ seemed to determine pain in the part. We might also recal the experience of M. Delasiauve upon a maniac who freed himself from his hallucinations, believing that he was thereby thwarting the machinations of his enemies. A general law seemed to result from these observations, common to all mental and nervous affections, that the conviction of the patient, what we call vaguely *imagination*, and what M. Delasiauve calls by the more precise name of *belief*, exercises a great influence on the condition of the patient, and determines, according to the opinion of the patient, the relief or the aggravation of the suffering."

From these observations, we are naturally conducted to somnam-

bulism, in which it appears also that *belief* plays a great and important part.

The phenomena observed in artificial somnambulism are, partial or total insensibility, rigidity of the limbs, excitement of certain faculties, and, lastly, the transposition of the senses and vision through obstacles. Leaving aside for the moment this last phenomenon, the only one wonderful, we find the others presenting themselves to a certain extent in ordinary states, such as dreams, reveries, or natural somnambulism. Between these, then, and artificial somnambulism there is but a difference of degree. Thus, in profound reverie, a state so natural and common, the body is sometimes immovable, sometimes we walk slowly without perceiving surrounding objects; we are insensible to touch, or to voices that address us. On the other hand, the imagination is on fire: we represent vividly to ourselves the objects and persons on which our thoughts are engaged; we address words and gestures to them; we perceive about us only those things or persons that may have some relation with our internal workings. In reverie, then, we observe immobility, partial insensibility, and excitement of the faculties as regards certain objects or certain persons.

Dreaming presents the same symptoms. Sleep renders us in great measure immovable, and insensible to objects of perception. Notwithstanding which, the interior conception is active; it represents objects with such vivacity that they appear present; and the illusion is so strong, that we not unfrequently begin to talk, to move about, or even to get up and walk. If at such a time any one questions us in accordance with the subject of our dream, we perceive the words, and add our reflections and responses; being sensible thus to things relative to our dream, but insensible to all the rest. It is a partial waking state.

We come now to natural somnambulism, in which all the phenomena of dreaming and nightmare are more distinctly marked. The somnambulist is insensible to a great number of objects of perception, but very sensible to others. He walks upon the ridges of roofs, and does not perceive the abyss over which he steps; he answers to a feeble voice, which speaks to him on the subjects on which he is occupied, and hears nothing of the clashing of chairs and tables that are moved about to awaken him. Recal the case of Castelli, related in the "Encyclopédie:" he wrote by the light of a candle which alone he could see. If this were extinguished, and others lighted about him, he stopped writing, and went softly to relight his own. He had only perception for a certain number of things, and was profoundly insensible to all others. It was a state of partial waking. The opinion, and, so to speak, the intention of the somnambulist, determines the amount and *direction* of the perspicacity or lucidity: one intends to taste liquids, and perceives if they are changed; another is fixed upon drinking only one, and finds its flavour in pure water, substituted. It is true that the conviction or belief of the patient influences his perceptions, as in the examples of nervous and mental maladies before cited. One somnambulist has, as it were, taken his resolution not to

awake, and he is insensible to pricking, burning, or pinching; another has his mind directed to awaking, and awakes by the touch of a feather.

This partial insensibility—this special perspicacity—conducts us to the phenomena of artificial somnambulism. The chief difference which separates this from natural somnambulism is, that the one is preceded by sleep, whilst the other is immediate. It takes place according to the conviction or belief of the patient. We do not think that there is any transmission of fluid from the operator to the subject, but only a belief on the part of the latter that he is about to fall into this state, which is sufficient to determine its occurrence.

The influence of *belief* on the production of this state was shown by the commission appointed by the Academy of Sciences about the close of the last century, of which Franklin, Bailly, and Lavoisier formed part. The phenomena of mesmerism were induced upon patients by *telling them* that they were subjected to the mesmeric manipulations; whilst none were produced by such performances, done *without the knowledge* of the subject. Since then, it has been asserted that it was not magnetism, but a fluid passing from the operator, that produced these phenomena; and that the results could be produced even in another room. When tried, it was said that the person operated on speedily began to manifest signs of some action upon her, to complain of heat, and remove her handkerchief, &c. But these signs are vague, and may be attributed to many other causes. In a crowded saloon, it is by no means unfrequent to find persons incommoded by the heat: perhaps many others had shown such indications, and had not been remarked. If the person in question had complained of cold, or any other sensation, it would no doubt have been attributed, in like manner, to the influence of the operator. When to one and the same cause we attribute such contradictory phenomena as heat and cold, we are very like to be deceived as to the true cause.

It is to this lack of precision in the relation of causes and effects, that we must attribute the one truly marvellous phenomenon of artificial somnambulism—that is to say, the pretended transposition of the senses, and vision across opaque obstacles.

Some have attempted to explain this latter on physical principles; as all bodies are porous, there might (it is said) pass through the most opaque medium a small quantity of light, imperceptible to eyes in the ordinary condition, but perceptible to the ecstatic regard of somnambulism. Thus all bodies would become transparent. But on this view, the bodies supposed to be seen ought to become also transparent, and therefore ought no more to be seen than the obstacles themselves.

It appears to us that the account given by somnambulists of the objects which they profess to see, is always sufficiently general and vague to apply to a great number of particular objects. A man, worthy of credence, told us that the first time he went to Marseilles he was taken to a somnambulist, who said to him, "You came from the North; your father lives in a small town,—I see him now; he is going

into the cellar." On writing to his father, it was ascertained that at that time he was going into the cellar. We asked him particularly if the indication had been just so precise; if it had not been rather, "You are a stranger; your father is in a small space, and is going down" (*il descend*),—vague propositions which might coincide with a thousand circumstances. He could not deny that it might have been so, and would not affirm that the information was as precise as it appeared after the father's answer. It is thus that the Duc de St. Simon relating, after the death of Louis XIV., a pretended vision, anticipatory of the event, which a young girl, looking into a glass of water, had had, may have inserted into the prediction circumstances which he only knew by the event. An honourable member of this society has related that a somnambulist had told him that he had a button of gold and a twenty-five cent piece. But is he quite certain that he was told precisely the article, or only that he had *something* in his mouth, to which he unconsciously added the designation?

We cannot too rigorously guard against our taste for the marvellous; we love the supernatural, and through this love we often deceive ourselves. I have been present at a *séance*, where this disposition was shown in a striking manner, when the public refused to be undeceived by one who offered to undergo the same tests as the mesmerized person.

A final reason arrests me and prevents me believing in any vision through opaque obstacles. Somnambulists have never seen anything but objects without any interest either for themselves or others; they are always blind to objects which might be to them of very great importance. At the time of lotteries, the drawing of the winning numbers was made at Lyons, Bordeaux, Lille, and Strasbourg, about 10 A.M., and numbers might be purchased in Paris up to 11.30 A.M. It might have been very profitable to the somnambulists to see these numbers, but it has never been done. In our own days, after the landing of our troops in the Crimea, it would have been equal to a fortune to have followed our army, and seen the victory of the Alma at the moment. But those who made fortunes were by no means somnambulists. Those who say that the somnambulists are inspired by spirits, which also turn and make vocal tables, also say that these spirits have not any mission to make our fortunes. The spirits prefer stating how many chairs there are in the next apartment, and how many coins there are in our neighbour's purse. But those who do not believe in spirits, but only in transparent vision, should show us how it is that they only see frivolous things, and are blind to everything of importance.

In regard to those phenomena that are credible, there is but a difference of degree between them and those of reverie, dreaming, &c. As to the transposition of the senses and the translucent vision, these are explicable by considering the vagueness of the indications, some coincidences which have been noted, the neglect of failures, and, above all, our love for the marvellous.

M. Ferrus thought that, in order to unmask the dangers and the abuses of magnetism, it ought to be made a subject of special discus-

sion before the society. Magnetism indeed has brought forth a host of juggleries, with which it would be well to deal scientifically. At a former epoch we have seen convulsionnaires and mesmerists; in our own times we have table-turnings and familiar spirits. The highest saloons are open to skilful magnetizers; recently a lady was so vividly impressed by one of these exhibitions, that miscarriage was produced. We ought then to expose the phantasmagorias which impose upon so many of the weak and unreflecting, and also upon a few highly honourable persons. It is important, also, to trace the analogies of these phenomena in the pathological conditions occasionally met with. There is nothing completely mysterious and that may not be penetrated, at the root of these mystical phenomena. I beg to introduce two cases, which have reference to these questions.

Amid the infinite shades of variety which prevent any exact definitions, spontaneous somnambulism assumes two distinct forms; in the one, almost analogous or closely united to dreams, it appears a simple accident of ordinary sleep; in the other it approaches hysteria, catalepsy, and ecstasy. In the first it is very difficult, if not impossible, to enter into communication with the subject; and it would, perhaps, be dangerous to attempt it when in a perilous situation. In the second, on the contrary, where the attacks come on during the waking state, the subjects easily establish relations with their friends, or even with strangers. To these two conditions is allied a third—artificial magnetism, or induced magnetic sleep, in respect of which have arisen long, angry, obscure, and obstinate debates, which yet await a solution. We shall confine ourselves at present to a division of somnambulism into *nocturnal*, which takes place in natural sleep; and *diurnal*, which comes on in the waking state, amid the most diverse circumstances, and presents the most defined neuropathic characters.

The form assumed by my two observations is the latter; they both occurred in my own practice. The two subjects of them were young, recently married, happy women of society, and so far from having anything to gain by fraud, they had both the most powerful motives for concealing the affection, if it had been possible.

"CASE I. Madame N. had been from her infancy subject to slight nervous affections, which were aggravated at the period of puberty. After this time they diminished, and only appeared at long intervals until just before her marriage. Of an hysterical character, these affections were then almost instantaneously developed under the influence of a strong moral emotion. She had witnessed an assassination. Marriage did not diminish, but rather increased their intensity; at a later period, their form was modified; from being hysterical, they were progressively transformed into a cataleptico-magnetic sleep, to which sometimes convulsive movements were added. From this condition she could not by any means be aroused, yet she answered exactly to the questions of her husband, who brought himself into relation with her by simple contact; and she predicted the return of the crisis, without preserving on her awaking the least remembrance of what had passed. Pathological conditions worthy of notice had preceded or coexisted with the somnambulist condition; Madame N. had been almost completely deaf for two months, without obvious cause. This was now reproduced, apparently as a sequel to a jolt in a carriage, and lasted a year.

"There were frequent febrile attacks, with shivering and burning, during a space of fourteen months; and in this time her stature increased an inch, although she had passed the age of ordinary growth.

"The crises, which, as to duration, varied from one to two hours, were ordinarily preceded by uneasiness, agitation, numbness, and pandiculation; and immediately before the accession, an acute pain in the nape of the neck. M.M. Lallemand and Planidoux, who were consulted, after some hesitation pronounced it a case of natural somnambulism.

"Madame N. was submitted at Nîmes, where she then lived, with the consent of those two physicians, to the operations of a magnetiser, a relative. During the induced sleep, she gave marks of great lucidity.

"On another occasion, at Montpellier, when no one was present but her husband and M. Lallemand, who has often related the circumstances to me, Madame N., during the natural attack, declared that she saw a person of her acquaintance going to a chemist's shop, distant from the house, in a large flowing dressing gown. This was her father; and M. Lallemand going out to inquire, found that the circumstance had occurred as she had related it.

"Being called in to give my opinion on the state of Madame N., I also observed many remarkable peculiarities. Although presenting a very healthy appearance, she had frequent *malaise*. The principal functions of the economy were performed with sufficient regularity—nutrition, for example, was perfect; but the appetite was fantastic to the extreme. A lively exaltation of the cutaneous sensibility was manifest in the cervical region, about the spinous process of the second vertebra. Even in the normal state, she complained much of the lightest touch there. All impressions which she received seemed to 'echo' there. Having once touched this part as gently as possible, Madame N. felt extreme pain there the whole day. The touch of a Napoleon caused less suffering; the temperature of the gold *rose rapidly* on the contact. This essay led me to try the application of a piece of magnetized steel. During one of the crises I touched the painful spot with this, and she manifested no uneasiness; on awaking, the ordinary suffering was less than usual; and these results have been repeated.

"After many attempts, I succeeded in establishing a communication by voice between us. Informed hastily by her husband that she was in a state of somnambulism, I went to see her. She was immovable in bed, and did not seem conscious of my arrival. My hand was placed in hers by her husband. Her limbs were in a complete state of relaxation, not presenting the rigid phenomena of catalepsy.

"At first Madame N. only repeated my last words, but at length seemed to recognise me, and said—'Ah! it is he who wishes to cure me; he has undertaken a difficult task; he wishes to give me sulphate of quinine; it is well, I have no objection; let him do what he will; besides, I know nothing; somnambulists generally say foolish things.' She then went on to describe the methods that had been before adopted for her cure, and mimicked with spirit the *brusquerie* of M. Lallemand, and the gentle soothing manner of M. Planidoux.

"Before the application of the magnetized steel, I had once observed Madame N. during the sleep. She had announced during the previous crisis the day and hour when the next would occur; at this I proposed to be present. I was there before the time; the patient knew nothing of her own prediction; but a little before the time announced, she told me she felt inclined to sleep, and she lost gradually her accustomed vivacity. She became uneasy; the respiration became quicker, and slightly stertorous; she then slept without the least agitation.

"At this latter examination, Madame N. had exacted from me a promise that I would not touch her—a promise which I should have kept, but during her husband's absence her arm was thrown out of bed, and struck violently a marble

slab. I tried to replace it, but the attempt caused great suffering; and after she awoke, which took place without any consciousness of what had passed, she complained of great pain the whole length of the arm.

"Madame N. was occupied during her sleep with the same subjects that had formed the topics of her waking conversation. Thus, having been relating to me the death of a man whom she very much disliked, in her sleep she assured me '*que le diable lui-même ne voudrait pas de son âme.*'"

"CASE II. Madame B., a native of Havannah, æt. nineteen, married eighteen months before, had always before her marriage enjoyed good health, with the exception of some nervous pains with tendency to faintness. Nevertheless, she was occasionally affected with low spirits and involuntary tears. Sexual intercourse gave her some pain, and at the approach of the menstrual period she had considerable lumbar pains. All at once, at the beginning of Feb., 1841, without appreciable cause, she fell anew into repeated syncopal attacks, with hysteriform convulsions, delirium, and hallucinations. These symptoms, after some hours, were calmed by the use of assafoetida. On the following days, particularly after meals, there occurred slight crises, marked at first by impatience and irritability, then by insensibility of the organs of the senses, by uncertainty of action and torpor of the intellectual functions. Towards the middle of the month, the occurrence of the menstrual flow checked the recurrence of these phenomena; but a week had scarcely elapsed when the syncope, convulsions, lumbar pains, the delirium and hallucinations reappeared with increased frequency and violence. The first half of March was quiet;—on the 16th there were headache, vertigo, and pains in the groin. The patient said, also, that 'something ran along the eye, and the eyelids fell in spite of herself.' These phenomena again disappeared with the return of the menses. On the 26th, at midday, the convulsive movements returned; the ears tingled, the eyes closed; at last Madame B. neither saw nor heard, yet she spoke volubly, and expressed herself clearly. In this state she got up to go out, made two or three steps in the street, then suddenly complaining of feeling something go down from her head to her feet, she regained the use of her senses, and continued her walk. Similar attacks, generally preceded by renal pains, occurred frequently in the beginning of April. From the 12th to the 15th there occurred delirium and hallucinations, which left much weight of head behind. On the 23rd, Madame B. was frightened by a storm, and had syncope, convulsions, and delirium, which were repeated during three days. On the 26th, the accession assumed an entirely different form. To the preceding symptoms was added an excessive sensibility of the whole surface; the different parts of the body became successively motionless, and as if paralysed. She could not breathe without great labour, the tongue did not obey the will, deglutition was impossible, vision became extinct, and consciousness was lost. She was made to breathe assafoetida, and the symptoms subsided after twelve hours. In subsequent attacks there were other strange symptoms. There were, at first, convulsive movements; the globe of the eye rolled upwards so as only to show the sclerotica; there were hallucinations. She spoke incoherently; then her mind seemed to be enlightened, the ideas became connected, and her thoughts and language assumed an unwonted elevation. Although surrounded by friends, she thought herself alone. On awaking, she asked for food, and then slept peaceably until the next morning. Her features then were heavy; she recognised those about her, but knew nothing of what had passed the day before. There were repeated attacks of the same nature, during which she would recall events which had transpired in the previous crises. Sometimes when apparently well, and in all other respects collected, she would miscall her husband and all her friends. One of the attacks was complicated by an extremely violent lumbar pain. She said it felt as though each bone of the spine was divided from the other, and in each a boiling liquid.

"In September, being called upon again to take charge of Madame B., I had ample opportunities of verifying the singular phenomena of this affection, to which, also, many of our medical brethren can testify. The treatment which I prescribed was followed for some months by a notable amendment; but the weather having become very cold and wet, the crises occurred again at very short intervals. Their nature is shown in the following letter to me from her husband, an eminent *littérateur* and advocate. The clear and simple style of the document, and the honourable character of M. B., do not permit any doubt of the veracity of the narrative:—

"The more I observe the strange malady of my poor wife, the more I am astonished at the phenomena of double existence which it produces in her. When she recovers her senses, she knows nothing of what has passed in the attack; when she is again ill, she recalls the former attack with surprising fidelity. At these times the senses seem changed; she has even special ones; she hears certain words, and not others; she recognises the portraits of persons, and not the persons themselves. In what she does and says, all is connected and rational; she takes up the thread of ideas from one accession to another; orders the details of the *ménage*, and calculates her accounts without committing the least error. As the attacks succeed each other with great rapidity, she awakes doing things which she cannot explain—so little relation have the two lives to each other. Any pain, however slight, wherever originating, brings on these attacks; and their strength is proportionate to the pain. In its slightest degree, some attention is required to discover the symptoms of the nervous state; if this degree augments a little, she becomes animated, gesticulates and speaks with force, and her features are convulsed; if it be more advanced still, the condition of isolation is developed, she neither hears nor sees any one, speaks to herself, recites, runs, sings, laughs, and weeps; lastly, her discourse becomes incoherent, she confounds objects, loses certain senses, and supplies their place by others, which experience every day reveals to me. There are other effects not less *bizarre*: she is at such times deprived of the faculty of pronouncing diphthongs and certain consonants, seeming like a child learning to speak. Suddenly one of the senses fails, or an organ is paralysed: a finger, the eyelid, the tongue, the knee, the lips, &c. In other cases the exhaustion is so complete that all movement is impossible, yet she hears all that I say; for in coming out of this state, she repeats word for word what was said. Lastly, if on awaking she forgets all that has passed during sleep, it is not so with the sleep, in which she knows all in which she has been engaged before the accession of the affection."

"During the numerous visits which I paid, I observed myself the greater part of the circumstances mentioned by M. B. Generally she did not recognise me, although she named me immediately on having shown to her a photographic portrait of me. She did not distinguish my voice, and to convince her of my presence I had to place under her eyes my signature, which she then compared with one which was underneath the above-mentioned portrait. I reproached her one day for ingratitude in not having answered some compliments which I had paid her; but as she did not seem to understand, I wrote it down. She then took a pen and excused herself, on the plea that she had not recognised me, but was very grateful for all my cares. Thus another anomaly was manifest, as she read this with eyes upturned under the lids, not having been able either to see or hear me. However this may be, the accidents became by degrees less frequent, and finally ceased. Since then Madame B. has become a mother, and she does not now retain any traces of her old sufferings."

General Observations.—It was the same with Madame N——. In both cases the affection was circumscribed within a period of four or six years.

In the last instance, so curious from the mobility and infinite variety of the symptoms, the characters of somnambulism were even more clearly marked than in the first instance. Not only could Madame B— answer questions, and perceive objects otherwise than by sight, but she rose up, walked, rode, eat, looked after the house, wrote, made up her accounts—did, in a word, all that a somnambulist could do. The attack being passed, she forgot every act connected with it, but on the next occasion took up the broken thread. Nevertheless, if in all these particulars these two cases seem allied to natural somnambulism, in others, not less important, they differ widely from it, and require to be placed in a separate category. Whilst natural somnambulism occurs without shock, in the night, in course of sleep, these affections come on indifferently at any hour of the day, when the patient is awake, and under the form of a nervous crisis. Lucid sleep is not then a simple modification of ordinary sleep; it results from the violence of the cerebral spasm (*du spasme cérébral*), and very often the attacks are ushered in by divers precursory phenomena—general disquiet and uneasiness in the limbs, headache, vertigo, sadness, weeping, desire to laugh involuntarily, yawning, numbness, syncope, agitations or convulsions. In one of our cases there was pain in the nape of the neck; in the other, lumbar pain and general exalted cutaneous sensibility. (M. Ferrus proceeds to indicate the further differences between this condition and that of natural somnambulism, which may be seen by comparing the phenomena of the cases recited.)

Considering these numerous differences, we are naturally led to admit two sorts of somnambulism; one equally known to physicians and the public, and another which is related to certain periodic neuroses, if even it may not be considered a variety of these, upon which the phenomena of somnambulism are engrafted; these occurring always at a comparatively advanced period of the affection, the earlier stages of which resemble a *mélange* of syncope, catalepsy, hysteria, and delirium.

The astonishment and the lively interest and curiosity which attach to the singular symptoms of this kind of somnambulism, have caused authors to neglect the medical and practical view of the question; and so we know but little of the etiology, the progress, and prognosis of this affection. We may conjecture that the general causes are those common to nervous maladies. As to the immediate causes, we are still in the dark. In these two cases, menstruation exercised an opposite influence. In one, the crises corresponded with the approach of the period; in the other, they were temporarily relieved by it. In the course of the malady, the general health and intelligence were but little affected, and the sequelæ were unimportant. Yet we may suppose that from these, as from other neuroses, might result mental alteration, profound and durable. In neither case have we traced any direct hereditary influence. Both were born and brought up in hot climates; both were cured after four or five years of suffering; both became pregnant after some years of marriage, and after the entire cessation of the affection. Their children are living. Both have become widows, without any recurrence of the attacks from the profound

grief which they experienced. The question arises as to the relation of such phenomena to those of mesmerism: we only propose, but do not at present attempt to answer it. One word in conclusion: we must admit nothing without examination—without proofs and prudent investigation. This obligation is imperious to every serious inquirer: it is equally the duty of every friend of science to repudiate nothing which experience may render manifest. In a word, we must neither be in haste to recognise the existence of extraordinary facts, and to deduce theories from them, nor irrevocably to reject phenomena, because they pass the ordinary limits of our knowledge.

On Disordered Sentiments and Affections. By M. AUZONY.

IN the "Annales Medico-Psychologiques" for January, 1858, M. Auzony gives an analysis of 415 cases of insanity observed during three months at the Asylum at Fains, with a view to ascertaining the frequency and conditions of the complications of intellectual disorders with those of the affections and emotions. For this limitation of time, certain reasons are given which lead the author to prefer a short observation to a long one.

The emotions may be directed singly or simultaneously to four objects—God, the individual himself, his family, and his species,—and are manifested as

1. Adoration, honour, worship, love, fear, &c.
2. Instinct of self-preservation.
3. Instinct of reproduction, including the sexual emotion, conjugal and parental affection, and the general feeling of the ties of consanguinity, &c.
4. The instinct of social relations, including politeness, benevolence, pity, esteem, gratitude, justice, generosity, admiration, courage, enthusiasm, patriotism, &c.

All these are susceptible of exaggeration, of diminution, of perversion, and of abolition. Thus, in the first class, *exaggeration* produces *mysticism*, *superstition*, and *demonomania*; *diminution* produces *scepticism*, *incredulity*, *Voltaireianism*; *perversion* produces *blasphemy*, and *apostacy*; and *abolition* produces *indifference*, *materialism*, and *atheism*. The corresponding results in the second class are, from *exaggeration*, egotism, covetousness, fear, pride, ambition; from *diminution*, prodigality, rashness, carelessness; from *perversion*, avarice, intemperance, mortifications, voluntary mutilations, and suicides; from *abolition*, apathy and inertia. In the other classes, similar perversions result in hatred, treason, jealousy, erotism, contempt, mockery, harshness, pride, ingratitude, revenge, cowardice, homicide, &c.

The kind of malady in its successive phases influences greatly the mode of alteration of these emotional faculties. Thus, in paralytic insanity, there is most frequently observed at the commencement an exaggeration of the sentiments, then perversion, followed by enfeeblement and obliteration; and similar variations are observed in the other forms. From the tables given it appears that "delirium of the affections" almost constantly complicates that of the intellect. Out

of the four hundred and fifteen cases, there were only thirty in which the *integrity* of the emotional faculties was preserved; and it cannot be doubted that a longer observation of these cases would have greatly reduced the proportion. Of these thirty, eight were imbecile; seven were cases of intermittent mania; six were melancholia; four were monomania; two were mania; two were epileptics; and one was paralytic insanity. In the three remaining sections of the classification adopted—stupidity, dementia, and idiocy—all the cases were complicated with some emotional or *affective* disorder.

The classification here alluded to is in itself not without interest. The 415 cases comprised all that were treated during the three months at Fains, and are divided into two groups in some degree corresponding* to acute and chronic cases. The first includes mania (36); intermittent, or remittent mania (53); monomania (43); lypemania or melancholia (73); in all 205 cases. The second includes stupidity (4); dementia (71); paralytic insanity (14); epileptic insanity (27); imbecility (71); and idiocy (23); in all 210 cases.

These two groups, nearly equal in number, vary much in their relations to emotional complications. In the former group, the emotions were perverted or exaggerated in 30 and 34 per cent. of the cases; whilst in the latter group the proportions were but 10 per cent. of perversions, and 4 per cent. of exaggerations. On the other hand, in the former group, there was only a proportion of 20 per cent. of enfeeblement, and six per cent. of abolition of these faculties, whilst in the latter, 35 per cent. were enfeebled, and 45 per cent. abolished.

Of the whole number (415), in 85 cases (or 20 per cent.), the sentiments were perverted; in 77 cases they were exaggerated; in 116 (or 28 per cent.) they were enfeebled; and in 109 (or 26 per cent.) they were abolished.

The perversions of affective sentiment were by far the most frequent in lypemania, occurring in 27 cases out of 73. The exaggerations were proportionally the most frequent in mania, occurring in 19 out of 53 cases of the remittent character, and in 15 out of 36 of the continued kind. Diminution of the affections was observed by much the most frequently in imbecility, viz.—in 34 out of 71 cases. Abolition was, as might be expected, most frequent in dementia—in 44 out of 71 cases. The following table will facilitate reference:—

State of Emotional					
Faculties.		1st Group.	2nd Group.	Total.	
Integrity	in . . .	19 . . .	11 . . .	30	
Perversion	„ . . .	63 . . .	22 . . .	85	
Exaggeration	„ . . .	69 . . .	8 . . .	77	
Diminution	„ . . .	42 . . .	74 . . .	116	
Abolition	„ . . .	12 . . .	95 . . .	107	
Whole number		205 . . .	210 . . .	415	

M. Auzony remarks, in conclusion, that although as a general rule the disorder of the affections is consequent upon, and due to, that of

* Not M. Auzony's analogy, we ought to add.

the intellect, the order may be reversed, and the "effect become the cause." Thus, a young advocate of perfectly sound mind, and with no hereditary tendency to insanity, having obtained the promise of the hand of a young lady to whom he was devotedly attached, could not support the happiness, and became a prey to incurable melancholy, with hallucinations and constant chimerical terrors. He adds that this "delirium of the affections" requires the same kind of treatment as that of the intellect; but that the moral treatment ought to "predominate, and, in fact, be almost exclusive. It requires, also, on the part of the medical attendants, an increase of vigilance, of tact, and of discernment."

Case of Mania with Homicidal Tendency. By M. MOREL.
(Abridged.)

ON May 3rd, 1852, Joseph Chanel, a road-labourer in the department of the Vosges, met an acquaintance named Olivier, whom he passed apparently sulkily, without taking any notice of his salutation. Immediately afterwards Olivier heard piercing cries, and on turning saw Chanel pursuing a child, whom he seized by the collar, and killed by repeated blows with a hatchet. Olivier wished to advance to prevent the murder, but dare not, as Chanel, brandishing his weapon, threatened to kill him also if he came near. He passed several men whom he also threatened to kill, "as he had done that other one," if they molested him. Returning home quietly, after purchasing his provisions, he was arrested by force of numbers, and said, "What do you want? I have killed a child, I don't repent of it; it is time to have done with them." Examined, he acknowledged the crime without any expression of regret; he wished to kill some one on that day, and had taken his hatchet out on purpose. Taken to the prison of Epinal, he was violent, and said that "all his food was poisoned." The physician, however, did not think him insane. On the 23rd of May, he was removed to the Asylum of Maréville, to be under the observation of MM. Morel and Blondlot.

The report of these alienists is divided into three parts:—

1. His present mental condition.
2. His antecedents.
3. The conclusions drawn from these.

1. On his admission to Maréville, Chanel was violent, and abused and attempted to strike the officials. His expression was sombre, his eye threatening; he required the strait waistcoat. He answered contemptuously or abusively all questions and observations: "What are you preaching about? I don't like sermons." He whistled and sung, but ultimately answered more calmly. "What I have done, is done—it was time to end it; if you had suffered as I have you would soon see. . . ." All that could be understood of his sufferings was that all his food was constantly poisoned by some unknown agencies, which he called "Magogie" and "Question." Moreover, he affirmed that he was not insane, but expressed the utmost indifference to his fate.

There was no sign of physical disturbance; pulse about fifty; tongue clean and natural; appetite normal; sleep apparently untroubled. Sometimes he was mute, but after the douche he became more tractable.

On the 27th there appeared a change; he was no longer violent, but depressed and looked on the ground constantly. On being questioned, he would only answer "You know all about it."

Interrogated on the 3rd of June, he answered as usual; but M. Blondlot attempted to reason with him: "Granting that your food was poisoned, is that a reason for killing a child?" "That may be, but it was time to end it—as well him as another." On the 15th he again became violent, and refused food. There was a furred tongue, which he attributed to poisoned food as usual. An emetic, which acted violently and copiously on the stomach and bowels, and a bath, restored the former condition. When again tranquil, Dr. Morel urged him to write to his mother, "as he was likely to be condemned to death." He did so, but with indifference as to his fate. On the 5th of July, renewed violence with public indecency, attended as before by digestive disorder. M. Morel remarks that there was a striking periodicity in these functional perturbations; and that they were always attended by greater mental agitation. Up to the 26th of September nothing more could be elicited by question or observation, than that his food was poisoned, not by a poison that kills, but that causes great discomfort. His vengeance must fall upon some one, no matter whom; and he had killed the child to make an end of the business (*pour que cela finisse*). He was ready to do the like again if tormented any more. He was not insane, and would rather die on the block than be thought so. For the rest, total and brutish indifference.

2. At the age of nineteen he enlisted voluntarily, and after seven years' service he was discharged with a certificate of good conduct, in April, 1838. In 1848 he was local commandant of the National Guard, and in the same year was engaged to be married; but he committed certain extravagances, for which he was removed to the Asylum of Maréville, as likely to compromise the public safety. He was there quiet and orderly, and in a few months was restored to his family and his public functions. Before this it appears he had taken to drinking, had complained of headache, and had cranial and facial erysipelas, with epistaxis and bleeding from the ears. After this, his gait was occasionally hesitating, and his face frequently injected; his arms were affected with convulsive actions also. It was soon after this that he entered Maréville. Leaving the asylum in February, 1849, he was observed in a few months to be affected with great religious exaltation of sentiment. He attended all religious services, fasted rigorously, and confessed such sins that he said the priest was *lâche* for giving him absolution.

After the midnight mass, in 1851, he again changed completely—believed in nothing, blasphemed much, committed great excesses, and wrote threatening letters to the priests and civil authorities. Then appeared for the first time his dominant idea of the poisoned food, on which subject he quarrelled with all his family, and, becoming

gradually more and more violent, at last committed the crime related.

3. In the judgment passed on this case, M. Morel reviews the preceding circumstances, weighing their value and significance, and concludes that Chanel is a "depraved (*abruti*) being, in whom the sentiments are completely disorganized, and whose intellect has never been well developed. We have carefully guarded (he continues) against a simulated insanity; we have observed him at all hours of the day and night; we have tried to ascertain if these periodical returns are the expression of a pathological condition: we have continued our observations for four months, and we are convinced that all the acts of this man were the result of a general perturbation of the intellectual faculties. Chanel is a hypochondriacal maniac, with systematic ideas of persecution and evil influence exercised upon his person. This affection presents periods of exacerbation, and whatever may be the decision of the law, we are of opinion that any return to society should be interdicted to this individual, perverted both in his intelligence and his emotions."

In commenting on this case, M. Morel takes occasion to contest the theory of monomania as set forth by Ruel, Esquirol, Marc, and Georget. He rejects incendiary, homicidal, and other monomanias, as forming distinct affections of themselves, and considers them as "tendencies and symptoms" of the principal fundamental malady, general mental derangement. In support of this he analyses certain cases brought forward as illustrative of these monomanias, and shows that in the history of such cases there was ample reason to perceive that, independent of the crowning acts which gave character to the disease, there was general derangement of the mental functions, more or less explicitly marked.

On the Pathogenic Influence of Loss of Sleep.

By M. E. RENAUDIN.

M. RENAUDIN'S observations on this subject are so interesting and important, not only as showing the powerful influence of *insomnia* in the production of disease, but also as indicating the loose analysis of phenomena which is too often made in the science of etiology, that we shall endeavour in as brief a space as practicable to give the whole of his views.

"In tracing back effects to causes, we are often content with having found a cause which *may have* produced the effect, without carefully examining the whole of the phenomena; we often arrive at etiological data accepted without control, transmitted without examination, and by and by transformed into axioms which no one thinks of contesting. Where is the young girl who has not indulged in one or two dreams of love? If insanity follows some such dream, the statistics of moral causes are increased by a unit. If it follows a deception or a loss of property, again this is accepted without inquiry as the 'moral cause' of the affection. Lately the list of causes has been increased by another—viz., the residence amongst the insane. But between the fact which we consider the cause, and the malady which we regard as the effect,

there are intermediate events which we pass over in silence; which nevertheless often contain the pathogenic knot which it is of so much importance to unloose. I confine myself on this occasion to speak of one only, which plays an important part in the production of disease—loss of sleep.

“Ordinary maladies exhibit notable modifications, according as they are complicated or not with insomnia. Very powerful is the influence of sleep over nervous and inflammatory diseases, where opiates produce remarkable results, as well as over affections of the digestive organs. We may observe daily how prejudicial is interrupted sleep to the performance of the digestive functions. Derangement is produced when the normal duration of sleep is abridged by mental excitement or occupation. This effect varies from age to age, and the younger the subject the more necessary is sleep. If too often interrupted, there results a state of cerebral excitement, which prevents the possibility of the return of natural sleep without the employment of therapeutic agency. The confusion of ideas which is constantly experienced in the transition from the sleeping to the waking condition, becomes constant in the cases alluded to, and is aggravated into a form of insanity, the special type of which depends upon other causes which have preceded or induced this sleeplessness. The citation of certain facts will illustrate the position.

“When, in 1842, I undertook the direction of the Asylum of Fains, the cellular system was in great repute, and the thirty apartments which were in each section contained in a very small space individuals who could give themselves up to all the vagaries of their riotous delirium. The walls were thin, and yell arousing yell, there resulted an insomnia concert, which aggravated and perpetuated the delirium. The system being changed, this agitation disappeared; and amongst the patients many owe their recovery to the peace and quiet they were thus enabled to enjoy. But before this took place I had been taught a very important lesson. The nurses attached to this quarter began very soon after their admission to lose those qualifications which had induced us to select them. Their character became awkward, their irritability increased day by day, their intelligence declined gradually, and in some impending stupidity rendered their dismissal necessary, as well as a brutality utterly different from their primitive character. The privation and interruption of sleep had caused these changes, which disappeared quickly when they were removed and could have rest and quiet. The same results accrue to the nurses who sleep in quiet wards, and yet are unable to rest without interruption from fear.

“On my entrance at Maréville, I found the same results attending the cellular system. Whilst this was in operation the nurses had to be almost constantly changed, from causes similar to those just mentioned; and very few were found who could resist the consequences of such deprivation of sleep—consequences in many cases very serious.

“A young nurse was admitted a short time ago into the asylum, when, for some nights, the turbulence of the patients in her division interrupted constantly her sleep. Not daring to acknowledge her fatigue and claim some hours of repose, she laboured on without complaining of any inconvenience. Four days passed thus, but on the fifth she presented all the characters of an access of mania, hallucinations, excitement, restlessness, incoherence, &c. Had this continued long, the mania would have become fixed, but the cause being recognised, she soon recovered by opiates and repose. Two other cases more obstinate occurred within a short time. These facts are certainly exceptions, but the statement of such extreme cases will throw light upon other slighter phenomena.

“A man of good constitution, of jovial temper, and most irreproachable character, was suddenly informed that a grave accusation had been calumniously brought against him, and the letter in which it was contained was

shown him. The blow was too severe, and he exhibited an excitement almost maniacal. The first emotion passed away, he resumed his occupations, and his family hoped that all was well. They reckoned, however, without taking into consideration the insomnia, which remained as the final consequence of the moral tortures he had undergone. The least event startled him, the circulation was accelerated, the beatings of the heart became tumultuous, and after an incubation of some days, a violent attack of mania broke out. This was attributed *directly* to the moral cause, without investigating the process of evolution, and for some time nothing was done but to combat congestion, &c. At last opium and digitalis were given with notable good results; but for some reason or other this medication was abandoned, and the mania manifested itself anew with great violence, and will now doubtless be incurable. This case indicates the necessity of seizing *opportunity* as well as the proper remedies, or the time comes when treating properly the original cause will no longer remove the effect; the habit has become chronic. Sleep, re-established too late, fails to bring back calmness or the reaction of reason.

"I have been able in another case to trace the pathogenic influence of want of sleep in the production of delirium. A young girl, arrived at the age when the *besoin d'aimer* is strong, had some hysterical symptoms, which ended in a maniacal attack, which was most violent when she saw any youth with a resemblance to an ideal formed in her own mind, during a state of hallucination consequent upon loss of sleep. Her friends at first saw only the agitation, without seeking deeply into the cause, and instead of trying to obtain sleep they made her take prolonged baths at Plombières; the consequence of which was that the insomnia became chronic. The use of opiates produced a notable amelioration; when she could sleep the hallucinations almost disappeared, but as soon as the insomnia returned, the delicious conceptions returned also, and became in some measure fixed.

"I add the relation of another case which strongly indicates the necessity of examining minutely into the initial phenomena of this formidable malady:—It is that of a lady in whose family it was impossible to trace the least hereditary taint, herself being a person of extraordinary force of character. Her husband lost a large amount of money, and shortly afterwards she fell into a state of lypemania, against which the resources of medical skill have been hitherto powerless. Grief was regarded by all as the cause of this, but a more minute inquiry revealed a very different kind of sequence. These are the facts: one day she entered the house of a relative who had committed suicide,* and saw the body without having been forewarned. Wishing to relieve her husband of some care, she examined the papers of the deceased, and found details of the most delirious conceptions. She destroyed every trace of this, and had scarcely finished when her husband entered, and informed her of his losses. She appeared at first soothed by the consolations of her friends, but *continued sleepless*; no one inquired about this fact, and she did not think of mentioning it. A few hours of slumber might have saved her, but prolonged insomnia was followed by profound stupor, which will most probably terminate in dementia."

Loss of sleep seems also to be the primordial element of that marasmus which terminates the life of certain maniacs, who seem to have no other lesion than a gradual loss of power, a true inanition from default of assimilation. We also remark the comparative harmlessness of even great excitement, when sleep is not interfered with; and the dangers of the period of prostration are increased in proportion as the

* The ensuing relation seems scarcely consistent with the previous statement as to the absence of hereditary tendency.

period of excitement has been marked by more or less insomnia. It is ordinarily by insomnia that the periodic returns of mania commence, followed by gastric disorder; and if we carefully observe these symptoms in those subject to periodical attacks, we may not infrequently cause the attack to abort, or at least make it a very mild one. Again we observe in continued mania, that insomnia marks the periods of aggravation and *recrudescence* of the delirious conceptions. In many cases, so long as regular sleep can be obtained, the malady is reduced to a quiescent state, a sort of "abstract virtuality;" but a few days of insomnia suffice to light it up actively again. One of our monomaniacs is in this case; he is the creator of heaven and earth; but beyond this conception he is one of the most polite and mild of men; but deprived of sleep from any cause, he becomes irritable, and a prey to extreme excitement; and thus his theoretic delirium becomes open and practical.

Chronic insomnia is frequent amongst those who pass lonely lives, especially females; this arises from nocturnal terrors, and is often the cause of insanity. There is, at this time, in Maréville, a woman aged 40, who, under the influence of these nocturnal terrors, has become gradually subject to hallucinations of the eye and ear, which at first ceased when she was no longer alone. After some time the *expressions* of her terror ceased, and an amendment was anticipated; but instead of this, it was found that the supposed phantom had acquired more force and power, even sufficient to repress all manifestation of affright, by the order of an audible voice. This person would not have arrived at this point without the insomnia and the solitary dwelling.

"In general, when a moral cause has been the point of departure of mental alienation, it is rare that insomnia has not had an important share in the development of the affection, which, prepared by the psychical element, is only definitively organized when the somatic element has done its work by loss of repose."

MEDICO-LEGAL TRIAL—PLEA, "LUNACY."

CASE OF THE REV. W. J. J. LEACH.

[It was our intention to have entered fully into the consideration of the case of Mr. Leach, but as a verdict of sanity has been recorded by the jury, we will give this gentleman all the benefit of this decision, and say nothing that can further affect his social position. We append a report of the evidence as it appeared in the public journals at the time.]

A commission was opened on Thursday before Mr. Barlow, one of the Commissioners in Lunacy, at the Gray's Inn Coffee-house, May 20th, 1853, to inquire whether the Rev. William James John Leach was of sound mind and competent to dispose of his property. The commission was issued upon the petition of Julia Caroline Leach, the mother of the supposed lunatic, and at whose death he will come into possession of nearly 50,000*l.* in the funds.

EVIDENCE IN SUPPORT OF THE LUNACY.

Dr. Forbes Winslow said—I was first consulted in reference to Mr. Leach in May, 1853. He resided at that time at Upper Southwick Street, Hyde Park.

He was at that time in a state of mental aberration, and an attendant had the charge of him. His mind appeared to be morbidly excited upon religious subjects, and I have no doubt that he was insane. He was, in my opinion, labouring under several delusions connected with religious questions. I saw him again in 1856, when he then was living in a cottage at Hammersmith by himself, and I had some long conversations with him, which satisfied me that his mind was in the same state as in 1853. He said that the millennium was at hand, and that our Saviour would soon be upon earth; that all social ranks and distinctions of society were abolished; and he called my attention to a paragraph in the *Record* newspaper, which stated that an old woman had seen our Saviour near Bridgewater. He appeared to believe that this statement was true. At this time, Mr. Leach having exhibited no marked excitement or disposition to acts of mischief to himself and others, I advised that no step should be taken to restrain his liberty, but I directed that he should be carefully watched, in the event of his committing some overt act of insanity. A few weeks after I had given this report and advice, I was again consulted by the family, who represented they had ascertained that Mr. Leach had made an offer of marriage, and had actually engaged himself, to his housemaid! Recognising Mr. Leach to be in an insane state of mind, and quite incompetent, in consequence of his insanity, to act with a sound judgment in such matters, I suggested that he should be placed under supervision and control, but advised, before doing so, that two independent medical men should be called in to examine him, and certify to his condition before he was removed. He was subsequently placed in my private asylum. While he was in my establishment I had frequent conversations with him. He did not appear to think that the millennium had actually arrived, but that it was dawning, and he said that there was so much wickedness and fraud in this world at the present time, that it clearly showed the millennium must soon arrive. He said he did not actually believe that the old woman had seen our Saviour, but he said he should like to go and inquire into the subject. He then told me that many years before he had seen a vision of our Saviour on the cross, as God manifest in the flesh, while in the pulpit, and that the vision had converted him. I spoke to him upon the subject of his wearing his beard, and asked him to cut it off; and he said that while translating the Scriptures some years before, an accident had occurred, the nature of which he would not explain, and that a revelation was then made to him respecting his beard, and he now continued to wear his beard in obedience to Divine command, and in deference to the sanction of the Holy Ghost and Spirit; that on one occasion he had cut off his beard, and that he had suffered in consequence the greatest mental agony; and he considered he should be committing a great abomination to the Almighty if he were to do it again. He was also under the impression that there were five distinct voices within him which directed all his actions, and that one of them in particular was a special one, which directed him in every act of his life, whether trivial or important. I endeavoured to analyse his ideas, and to ascertain whether he alluded to the voice of conscience or the voice of reason or judgment; but he said the voices he referred to were nothing of this kind, but were special to himself. He said none of the voices were audible ones. He also told me that it was his custom to pray in an erect position, for several hours, in the middle of the room, with his arms in front of his head, but he only prayed mentally, and did not utter a word; and when he was tired of standing, he prostrated himself on his face. He said that he generally prayed for the restoration of the miraculous gifts to the Church, and he expected that the result of his earnest prayers would be that he as part of the Church would have the power to bring the dead to life, to restore sight to the blind, and to heal the sick. He spoke about his servants, and said they ought to be treated more kindly than they were, and more as equals, and that

he dined and took his meals with his servants and kissed them in the morning, and allowed them to sit on his knee. He also said that after family prayers he had his servants in the drawing-room and played cards with them until three o'clock in the morning, and between the deals he read chapters out of the Bible to them. I told him that such proceedings as those were contrary to the views entertained by gentlemen and persons in his position, and that they were not consistent with the position of a gentleman and a clergyman; and he replied, that it was part of his religious course of life so to comport himself with his servants. He also said that he was engaged to be married to one of his maids, and he said that he kissed this one upon the lips and the other upon the cheek. I then asked him whether, supposing he should be set at liberty, he would purchase pistols again, and he said he certainly should, and that he should carry his gunpowder in his waistcoat pocket in order that it might be kept dry. His mind appeared so much disordered by religious impressions, that it was very difficult to get him to converse upon any other subject. He displayed a good deal of shrewdness, which was very common with lunatics, who very frequently exhibited great caution and cunning in concealing their hallucinations. Dr. Winslow, in conclusion, said he had no doubt that Mr. Leach was of unsound mind, and that he was quite incompetent to manage his affairs or to take care of his property.

Dr. Winslow was subjected to a long cross-examination by Mr. Chambers. He said he had no doubt that Mr. Leach would be able to solve any proposition of "Euclid" that might be placed before him; but this, he said, would not at all alter his opinion of the state of his mind. He advised his family not to put him under restraint until he committed some overt act of insanity, and the overt act he committed was promising to marry, and being about to marry, one of his servant maids. Witness considered that the servants had exercised undue influence over a man whose mind was affected, and that he had been entrapped into making the promise to marry, and he thought it his duty to interfere to prevent a man in an insane state of mind from committing himself in such a manner. He advised that two independent medical men should be called in to examine Mr. Leach, and give the necessary certificate to enable his friends to place him under restraint. He was not aware that one of the gentlemen who signed the certificate had been the assistant and was now the partner of Mr. Sidden, the brother-in-law of Mr. Leach, but he believed it had been so stated. He should not think of reasoning with a man who told him that the millennium had arrived, because he did not think that any man who came to such a conclusion, contrary to the evidence of his own senses, was a fit subject to be reasoned with. He was aware that many eminent men, divines and others, had expressed very extraordinary opinions upon the subject of religion, and he did not form his conclusions as to the insanity of Mr. Leach from any one particular fact, but from all the circumstances connected with the case. If any man, however, were to tell him that he had seen our Saviour upon the earth, he should consider it a very grave circumstance in reference to the state of his mind. The vision he referred to he represented he had seen twenty-seven years before. Witness had some conversation with him in reference to his wearing a beard, and he said that it was effeminate to cut off the beard, and he quoted several passages from the Scriptures referring to men making themselves like women, in confirmation of what he stated. He afterwards said that, while engaged in translating the Scriptures, he found a particular word which justified him in supposing that it was the Divine command that he should wear his beard, and that he did so by the Divine authority. Mr. Leach also had the delusion that he had been mainly instrumental in promoting the abolition of the punishment of death for all crimes, and he considered that he had effected this by writing a letter to the *Times*, which was never inserted, and by conversations he had had with persons in omnibuses upon the subject. With regard

to his intended marriage, he said that he had promised one of his servants to marry her, and that it would be disgraceful and dishonourable not to do so. He also said that he had seen the father and mother of his intended bride, and that they had consented to the marriage, and everything was arranged, when his mother interfered and got him shut up in a madhouse. Witness told him that he could not expect any happiness from such a union, and he replied that the girl was a very well conducted young woman, and he believed he should be very happy with her. Dr. Winslow then said he did not mean to have it understood that he considered it by any means an indication of insanity that a man of fifty-four should marry his servant; but he coupled the fact with the history of the case and with Mr. Leach's delusions on several topics, and this led him to the conclusion that Mr. Leach was not of sound mind, and unfit to manage himself and his affairs. He said that Mr. Leach appeared to be quite aware that he would come into possession of a large sum of money at the death of his mother, and he appeared to desire to sell the reversionary interest for an annuity for his life. He appeared to have a great horror of his mother, and he understood that they had quarrelled on account of her refusing to allow the servants to take their meals with him. Mr. Leach might have been able to pay his bills, and conduct operations of that description for twenty or thirty years; but this fact would not at all affect his opinion with regard to the state of his mind. When Mr. Leach talked about praying, he did not allude to the present inquiry, and he did not remember hearing him say that he had prayed to God earnestly, for an hour or more, that the inquiry might end in his being released. At the time Mr. Leach procured the pistols there had been a good many robberies committed at Hammersmith, and his own house was broken into on one occasion; and he said he had procured the pistols for his own protection. He believed Mr. Leach possessed extraordinary mental powers and literary attainments, and that he devoted himself a great deal to study.

Mr. Henry Sidden, a medical gentleman, the brother-in-law of Mr. Leach, was then examined. He deposed that he had married Mr. Leach's sister, and he had known him for twenty years. He then proved that in 1841 he was attacked with madness, and locked himself in his study, and when the door was opened he was found quite naked. He was under restraint at this time for a short period, when he recovered. He was again attacked in a similar manner in 1852, and a third time in 1853, and he broke all the windows in his room, and he said he did this in order that the neighbours might hear him play the flute. He had an enema syringe in the room which he represented to be a flute, and he broke it in endeavouring to play upon it. When he was attacked in 1853, Dr. Winslow was called in, and under his advice an attendant was provided for him, and he was closely watched. The witness also proved that Mr. Leach was continually talking about the millennium and other religious subjects, and also about an old woman having seen our Saviour at Bridge-water, and he appeared to believe that she had done so. His mother was seventy-three or seventy-four years old. In 1856, Dr. Winslow was again consulted, and upon his reporting him to be insane, witness took the necessary steps to obtain a certificate to authorize his removal to a place of confinement. The certificate was signed by Mr. Gray and Dr. Wood. The former was at that time house surgeon at Guy's Hospital, and the latter had since been appointed physician to Bethlehem Hospital. Mr. Gray had since become witness's partner.

Cross-examined—In the event of Mr. Leach dying unmarried, and without a will, a great portion of his property would come to witness's wife. In June, 1856, Mr. Leach executed a deed, under which he received a sum of 1194*l.*, and witness received a similar amount. Upon the death of Mr. Leach's mother, witness's wife would be entitled to 17,000*l.*, and Mr. Leach would receive 30,000*l.*, and if he

should die unmarried, and without a will, witness believed that sum would go to his wife. He and his wife went to visit Mr. Leach while he was at Dr. Winslow's establishment, and he was very violent, and his wife was very much frightened. He was violent on account of his having been placed in a lunatic asylum; but witness did not recollect that he said that he and his family had shut him up there to prevent him from marrying his servant-maid. He had been doing duty at one of the churches in the neighbourhood down to the period of his first attack, and he ascribed this attack to the excess of labour that devolved upon him owing to the illness of the rector, and other causes. He first heard of Mr. Leach's intention to marry one of his servant-maids in January, 1857, and it was after this that Mr. Gray and Dr. Wood signed the certificate of his insanity. He knew perfectly well what he was about when he executed the deed under which he obtained the 1200*l.*, and was not under any delusion. Witness invested the money for him with the exception of 100*l.*, which he handed to him. Dr. Winslow advised him to get the certificate of insanity signed by two independent medical men, and he considered Mr. Gray was perfectly independent, although he had been his assistant. Mr. Leach, on every occasion when he was free from the surveillance of the keepers, complained of being put in such a place of confinement, and said that he was no more mad than witness was. He desired to dispose of his reversion for an annuity of 800*l.* a year, and if he had done so, of course it would have prevented his wife from having a chance of getting the money.

In re-examination the witness said that his wife was in very delicate health, and Mr. Leach was much more likely to live than she was. She was at present too ill to attend to give her evidence.

Some other evidence was then adduced, showing the nature of the attacks in 1841, 1852, and 1853, and it appeared that, on the two former occasions, it was found necessary to put a strait-waistcoat on him. On the third occasion it appeared that the attack was not of so severe a character.

Elizabeth Burn, a person previously in the service of the alleged lunatic, proved that on several occasions she and the other servants played at whist with him and that during the intervals of the games he read chapters from the Bible. She also stated that he said there was no harm in playing cards if people read the Bible at the same time.

Dr. H. Southey, one of the Lord Chancellor's Commissioners in Lunacy, was then examined.—He confirmed the evidence given by Dr. Winslow as to Mr. Leach's delusions.

Dr. Wood, formerly the medical officer of Bedlam, deposed that he had several interviews with Mr. Leach with a view to ascertain the state of his mind. In the course of the conversations that took place between them, Mr. Leach said that everything he did was under the influence of the Holy Spirit, and that this Spirit controlled every action of his life. The pistols, he said, were purchased by him for self-defence, and he kept two of them upon the chimney-piece in the dining-room as a sort of chimney ornaments. In the course of the conversation he said that he should be justified in shooting any man who trespassed upon his field after evening; and he also said that he prayed that any man who might come into his house in the dead of the night might be brought to the muzzle of his pistol that he might shoot him dead. Witness remarked that it might occur that a man was in the house or the field innocently, and he said that did not signify, for he said he was sure no man could be killed who was innocent; and that, if they were not guilty of any offence at the time, they had committed an offence at some other period for which they deserved to die. He made the same observation with regard to persons who were executed. He accounted for wearing his beard by stating that God was displeased with him for his effeminacy in cutting off his beard, and said that the Scriptures commanded that men should not assume the garb of the other

sex. Mr. Leach also said that the reason he had the servants to take their meals with him was to humiliate his mother, who had insulted him the day before. During the conversation witnessed asked him if, supposing the present matrimonial arrangement was put an end to, and he were to desire to introduce a nice young lady to him, whether he would consent to the introduction without consulting the Holy Spirit, and he replied that he certainly should not, and if the answer were affirmative, he should at once consent to see the young lady; but if it was negative, he should say, "No, I thank you; I would rather wait a little time." He also said that it was at the instigation of the Holy Spirit that he took his servants upon his knees and kissed them. Dr. Wood concluded by stating that there was every characteristic of insanity about Mr. Leach, and the impression upon his mind was that he was a very dangerous lunatic.

Cross-examined—Witness did not state at the last inquiry that he considered Mr. Leach a dangerous lunatic. He was always of opinion that he was of unsound mind, but what had recently come to his knowledge strongly confirmed his original opinion, and also induced him to form the conclusion that he was a dangerous lunatic. He saw him on the 17th and 18th of the present month. The first interview occupied three hours, and the second more than two hours. He first saw Mr. Leach in January, 1857. He did not tell him what his object was. Lunatics possess so much cunning that, if he had been made aware of his object in visiting him, Mr. Leach would in all probability have corrected the hallucination under which he was labouring. He introduced himself by stating that he had understood that Mr. Leach possessed some peculiar opinions on religious subjects, and he wished to converse with him upon the subject of the millennium, and he appeared to have his mind so full of that subject that he readily entered into conversation respecting it. During the conversations they had together, Mr. Leach repeatedly expressed himself very angry with his mother for treating him as an insane person, and he said that she had been very cruel and unjust towards him, and that she was actuated by interested motives, and was improperly influenced by other persons. He also said that the young woman to whom he was engaged to be married was a very respectable young woman, and he considered that he was morally bound to marry her, and that it would be dishonourable in him to break the promise he had made to her. He would not swear that Mr. Leach did not say that he knew that a man could not shoot another for committing a trespass, and that a man had been hanged for shooting another who had trespassed upon his field.

Re-examined—The ground upon which he formed the opinion that Mr. Leach was a dangerous lunatic was, that he possessed himself of pistols, and said that no man could be destroyed who was innocent; for if he was innocent of the particular offence for which he was destroyed, he had no doubt committed some other offence for which he deserved death.

Dr. A. J. Sutherland, Physician to St. Luke's Hospital, was examined by Mr. Booth, Q.C.

I visited Mr. Leach December 8th and 9th, 1857, and on the 15th instant, for the purpose of examining the state of his mind.

December 8.—Mr. Leach said that in order to humble Mrs. Leach, and to show that he was master in his own house, he made the servants breakfast with him, and induced his hostler to play the Hallelujah Chorus to them one evening, and played a rubber of whist with the servants and a dressmaker. I asked whether this had any reference to the millennium; he said that servants will be differently treated during the millennium, that after opening the door at the close of the day they will be permitted to associate with the family. He said that he had prayed frequently and fervently that the miraculous gifts of the Holy Spirit might be restored to the Church; that if the old woman who was

stated to have seen Christ in the neighbourhood of Frome were a credible witness, he would believe that she had seen Him. He said there can be no mission without miracles; raise my wife from the dead, and I will believe in the truth of a prophet's mission.

He said that he had two brace of pistols, a pocket-pistol, and a revolver; that the latter he had not seen for some time; that he was in the habit of carrying his powder-flask in his fob; he said, "Put your trust in Providence, and keep your powder dry." He said that after long prayer he had received a deep intimation or sanction to allow his beard to grow, that about two years ago he had doubts upon the subject, and shaved it off, and that for several nights in succession he awoke, and experienced great terror of mind, as he thought that he had not acted up to the intimation and sanction he thought he had received.

December 9.—He told me that the intimation and sanction was as distinct as if he heard an internal voice—the still small voice of the Spirit—that it was an internal impression, that if he waited expectantly and with patience, he received the sanction for everything he did—*e.g.*, in ordering dinner. How far this power would be increased when the Almighty gave further evidence of the millennium, he said he did not know.

I saw Mr. Leach soon after the first inquiry at the Holland Arms, when he said that I had mistaken what he had said respecting the voice. I said I did not know how that could be as I had written down what he said in his presence, and had read what I had written over to him. He said there are four kinds of voices—The ordinary voice when we are speaking; the voice when we speak to ourselves; the voice when we think, and this voice.

May 15.—Mr. Leach said that the present was the dawn of the millennium. I asked what were his proofs. He said his own experience, that formerly when he prayed he prayed like any other man, but that now he feels a perceptible influence, the words he uses are by inspiration; and that if I were to kneel down to pray, that I should do so without any supernatural influence. He said that he was under inspiration when he translated the Bible; that there was a mistake, which induced him to pause; that it created a shock because it raised a doubt in his mind as to the supernatural influence, but that now he has no doubt that he was under the influence of the Spirit when he made the translation of the Bible. He again alluded to his having shaved off his beard. He said that a supernatural terror arose in his mind for two or three nights in succession, so that he had experienced a supernatural terror and a supernatural joy; the joy was when he saw the Saviour on the cross about thirty years ago.

I asked what other proof he had of inspiration? He answered that his hand was directed as well as his voice in the translation of the Bible. He said that his voice in prayer is influenced by the Holy Spirit. The same influence which induces him to pray as he does now, induces him to allow his beard to grow, and did induce him to translate the Bible.

Mr. Bovill.—What is your opinion of the state of Mr. Leach's mind?

Dr. Sutherland.—I consider that he is of unsound mind.

Mr. Bovill.—Do you think him capable or incapable of managing himself and his affairs?

Dr. Sutherland.—I consider him incapable of managing himself and his affairs.

Mr. Bovill.—Explain why you think Mr. Leach is incapable of managing his affairs.

Dr. Sutherland.—We are obliged to regard the bearings of the delusions upon the conduct of the patient, and although I agree with Mr. M. Chambers in thinking that the knowledge of the amount of a person's property, and the payment of his bills is an element in such consideration, yet there have been instances where persons possessing such knowledge have been found of unsound mind by juries, and incapable of managing themselves and their affairs.

No accounts could have been better kept than those of Mr. Devonport, and Mr. Gundry knew to a fraction the amount of his property. I repeat what I said on a previous occasion, that the delusions under which Mr. Leach labours render him peculiarly liable to become the prey of designing persons, and may render him dangerous to others.

Cross-examined by Mr. M. Chambers.

Dr. Sutherland.—I do not consider the particular doctrines of the Irvingites, Quakers, and Swedenborgians to have any bearing upon the case. Mr. Leach is a clergyman of the Church of England, and must be judged by his antecedents.

Mr. Chambers.—But supposing Mr. Leach did not consider it right to keep Sunday in the usual way, would not that have a bearing upon the case?

Dr. Sutherland.—It would have this bearing upon the case, that if Mr. Leach holds the doctrines to which you refer, he would not be allowed to do duty as a clergyman of the Church of England.

Mr. M. Chambers.—You say that Mr. Leach is likely to become the prey of designing persons; how does Mr. Leach's mind differ from that of any other person?

Dr. Sutherland.—We are guided by the ordinary operations of the Holy Spirit. Mr. Leach thinks that he is guided by the extraordinary operation. Our judgment is assisted, Mr. Leach considers that his judgment is superseded by the Holy Spirit.

Mr. M. Chambers.—Did you write down at the time that Mr. Leach thought himself inspired?

Dr. Sutherland.—I did.

Mr. Bartlett, the medical officer of Dr. Winslow's asylum, proved that he took charge of Mr. Leach in January, 1857, and he remained under his care until December of the same year. During that period the Commissioners of Lunacy had four or five interviews with Mr. Leach, and he had ample opportunities of communicating with them. He was eventually removed to a private lodging, under the authority of the commissioners, in the charge of an attendant, and under Dr. Winslow's superintendence. When he went to remove Mr. Leach in the first instance, he said that if he had known the object of his visit he would have shot one or two of them. Mr. Leach afterwards denied having made this statement. This witness also spoke to the religious delusions entertained by the alleged lunatic, and said that Mr. Leach told him he believed he had offended the Almighty upon one occasion by cutting off his beard, and that he would rather go to the stake than do so a second time. This witness was also of opinion that Mr. Leach was of unsound mind.

Cross-examined.—The manner in which he obtained access to Mr. Leach was by representing that he and those who accompanied him were a deputation connected with some schools in the parish. He made this false representation on account of his being informed that he was in possession of fire-arms. While witness was talking to him his two attendants pounced on him, and he then said there was no occasion for any violence, and that if they were armed with legal authority he would accompany them quietly, and they released him, and he made no resistance. He had no pistols on his person, but he found two pistols up-stairs, both of which were unloaded. He had a powder-flask upon his person, and he gave it to them. Before he went away, a ring was taken out of the wardrobe and given to one of the maid-servants, and Mr. Leach told her to keep it, and he said he would write to her, but he never did so. The servant wrote one letter to him, and this letter was given to Mr. Leach's mother. In the course of the conversations he had with Mr. Leach, he said that he had told his sister that he intended to marry his servant, and that he was shut up immediately afterwards, and that this was the only cause of his being shut up.

Mr. Dewsnap, another surgeon, gave evidence of the same character as to the condition of mind of the alleged lunatic, and this closed the case on the part of the petitioner.

The rev. gentleman then submitted himself to examination, and he answered the questions put to him very readily, and made a long statement, no portion of which appeared to exhibit the slightest incoherence. He said he could not deny that, upon two occasions—namely, in 1841 and 1852—he had been very properly put under restraint, and he was much obliged to his friends for the course they adopted respecting him. As to the year 1853, when it was alleged he had another attack, he denied that he was ill at that time, and said that it was quite unjustifiable to place him under restraint; and the last time that he was placed in an asylum in 1857, he considered a most cruel and unjustifiable proceeding; and he said he considered it a monstrous proceeding that, upon the certificate of any two medical men, an Englishman could be seized and placed in a lunatic asylum, which he thought was quite as bad as the Inquisition. He was shut up for nearly a year in a box, and not allowed to communicate with anybody; and it was only at last, through the interference of the Commissioners of Lunacy, who he knew were satisfied that he was perfectly sane, that he was allowed to leave the asylum and go to a private lodging in the care of a keeper. He declared that the proceeding of making out that he was insane would never have been attempted if he had not expressed his determination to marry his servant-maid, and his family evidently thought it was a less evil that he should be incarcerated for life in a lunatic asylum, than that he should lose caste by marrying a person so much beneath his own condition. He then proceeded to declare that a great many of the notions he entertained and the expressions he had made use of had been very much misrepresented, and he denied ever having expressed an opinion that the millennium had arrived; and, on the contrary, he was satisfied that it had not, although he certainly did believe that it was approaching. He then proceeded to argue, very ingeniously, that there was no harm in having his servants to take meals with him, and he said he was first induced to do so in order to annoy his mother, who had insulted him, and he merely desired to show that he was determined to be master in his own house. He admitted that he really believed that he was converted by the appearance of our Saviour upon the cross to him twenty-seven years ago, and that since that period he had been under the peculiar influence of the Holy Spirit, and that every act of his life was performed under its dictation. He considered this was merely the result of his earnest prayers to the Almighty, and he believed that any other man might obtain the same gift who prayed with equal earnestness and sincerity, and he said he hoped that in the nineteenth century this would not be considered a proof of insanity.

Mr. Coleridge then summed up the case for the petitioner.

Mr. Montague Chambers made a most eloquent and powerful address to the jury on behalf of his client. He said that although counsel practising at the bar of England frequently had disagreeable and responsible duties cast upon them, and had to deal with questions involving an enormous amount of property, and also the forfeiture of life, he did not know of any more perplexing duty that could fall to the lot of an advocate than to endeavour to take off the erroneous impression as to the sanity of an individual who, by the strange law of England, was placed in the position of Mr. Leach. Every unfortunate person who was the subject of an inquiry of this kind, whether sane or insane, entered the room as a culprit—as a man who had been already convicted; and he put it to them whether, when they first saw him come before them, they did not all turn their eyes towards him and regard him with commiseration and pity, and that they started with the idea that they were dealing with an insane man, or, at least, with one who stood in a suspicious position, and who had been

already condemned. The learned counsel who appeared in support of proceedings of this kind generally treated the matter very lightly, as though it was one of very little importance, and the jury was told that the unhappy subject of the inquiry had been already declared to be insane by competent persons, and all they had to do was to ratify the decision that had been before arrived at. He earnestly hoped they would not do any such thing in the present case, and that before they consigned a man, whom he represented as one perfectly sane, to a state of miserable restraint for the rest of his life, they would see that the evidence justified them in coming to the conclusion attended with such a fearful result. He called upon them to protect his highly gifted but unfortunate client from so dreadful a fate, and to treat him as they should wish to be treated themselves under similar circumstances, and to pause before they consigned him to a lunatic asylum for the rest of his life. He could not help expressing his opinion that an attempt had never before been made to establish a case of insanity upon such slight grounds as the present. The chief points relied upon appeared to be that Mr. Leach entertained opinions upon religious and other subjects that were considered by those around him to be extraordinary and erroneous; but could it for a moment be argued that this was a sufficient ground for saying that a man was insane? The study of the mental powers and the progress of thought and action were the most wonderful subjects of consideration—every day, every hour, fresh ideas entered the human mind; and when they entered into the consideration of these subjects, the greatest philosophers were baffled, and it not unfrequently happened that one thought the other a fool on account of some opinion he might have expressed. He did not deny that Mr. Leach entertained some erroneous opinions, and that his conduct upon some occasions had been eccentric; but he did not believe there was a man in creation who had not some eccentricities, follies, and even absurdities; and yet no one would think of sending such men to a madhouse. It appeared to him that his learned friends sought to confound these erroneous opinions with delusions; and all he could say was, that if they were to make the entertaining erroneous opinions a ground for saying that a man was insane, that they would have to shut up nine-tenths of the world, and that they would not be able to build a madhouse large enough to hold those who were considered mad because they entertained extravagant and unusual notions upon the subject of religion. Upon what ground was Mr. Leach to be shut up as a madman for the rest of his life? It was admitted that he lived quietly, happily, and with goodwill towards all mankind; and he contended that there was not the slightest danger to the community in his being at large. Mr. Leach was the grandson of a baronet, who left a large fortune, of which his mother had the life-interest, and the money at her death would be divided between him and the other members of the family. He was educated as a clergyman, and he performed his duties in the most exemplary manner until the year 1841; when owing to accidental causes—to some heavy duties being cast upon him—his mind gave way, and he had an attack of what was called acute mania. There was, however, no chronic disease of the brain, and he soon recovered, and he then devoted himself to religious study; and this led to a second attack in 1850, from which he also speedily recovered, and there was not the slightest evidence to show that there had ever been any organic disease of the brain. The learned counsel then referred to the supposed delusions entertained by Mr. Leach, and said, that as to his belief that he was impressed with the Holy Spirit, that many eminent and gifted men entertained similar opinions, and it would be idle to say that upon this ground Mr. Leach ought to be considered insane. A great deal had been made of the fact of Mr. Leach having purchased so many as five pistols; and he could not help expressing his surprise that his learned friends should have endeavoured to make this circumstance of so much importance, for it was

really to be explained in the most simple and rational manner. The fact was, that about the time of the shocking murder of the Rev. Mr. Hollest, at Frimley, by burglars in the dead of the night, Mr. Leach, in common with a great portion of the public, felt a good deal alarmed at the circumstance, and being about to remove to the country, he purchased a revolver for his protection. This was lost, and he then purchased a pair of small pistols, and he was induced by the gunsmith to purchase a second pair on account of their great beauty, and their having been exhibited at the Great Exhibition. It was clear, therefore, that his only object in purchasing these pistols was to protect himself, and there was not a tittle of evidence that he had on any occasion used or threatened to use them offensively against any individual. The learned counsel next referred to the fact of Mr. Leach having, in June, 1856, been allured to execute a solemn deed, under which he and his brother-in-law, Mr. Sidden, received nearly 1200*l.* each; and he put it to the jury whether, if his family believed him to be a madman, they would have permitted him to execute such an instrument. He did not wish to say a word that could be considered offensive to the scientific gentlemen who had been examined in support of the commission, because he knew them to be men of honour and integrity, and to possess high scientific attainments; but at the same time there could be no doubt that they confirmed the statement of the poet, "all things looked yellow to the jaundiced eye," and that when a mad doctor was requested to look at a patient who was considered insane, he immediately put on his yellow spectacles, and observing him through their medium, very readily came to the conclusion that he was in that condition. He should be glad to know how any of the jury would like to undergo the sort of examination to which this gentleman had been subjected day after day, and for hours together, upon the most private and delicate matters; such questions as, "Well, when are you going to cut off your beard?" "When are you going to give up the girl?" being put to him, and whether they thought they would be able to come out of it as well as he did; for, after all these long examinations, only a few isolated expressions were picked out, upon which these gentlemen founded their belief that Mr. Leach was insane. Dr. Winslow, a gentleman of high honour and integrity, felt himself bound to admit that when he was first consulted by the mother of Mr. Leach, he said he did not consider there were sufficient grounds for restraining his liberty, and advised his friends to wait till he committed some overt act of insanity; and what was that overt act? Why, the determination he expressed to marry his servant-maid; and this aroused the pride of the family, and they determined to prevent the marriage taking place by every means in their power; and what course did they take to effect their object? Dr. Winslow, like an honourable man, declined to act, and advised that two independent medical men should be called in to sign the certificate of insanity; and who was one of those "independent" men? Why, Mr. Gray, the former assistant of Mr. Sidden, the brother-in-law of Mr. Leach, and whom they had not dared to put in the witness-box on the present occasion. Did the jury doubt for a moment that but for this intended marriage Mr. Leach never would have been interfered with, but would have been allowed to live as he had done before, and there never would have been any attempt to make out that he was insane? The learned counsel then referred to the question of the property to which Mr. Leach would become entitled on the death of his mother, and called the attention of the jury to the fact that if he should die unmarried and without a will, both which events were very likely to arise in the event of his being declared insane and consigned to a lunatic asylum, no less a sum than 30,000*l.* would go to his sister, and consequently come into the possession of her husband, Mr. Sidden, who had taken a most active part in these proceedings. The learned counsel concluded a very able speech by stating that he felt he was performing a most solemn duty on the present occasion, and he earnestly

entreated the jury to weigh well all the evidence that would be laid before them before they returned a verdict the effect of which would be to place this unfortunate gentleman under the ban of being a lunatic for the rest of his life.

EVIDENCE AGAINST THE LUNACY.

Dr. Harrington Tuke, of Chiswick, was then examined. He stated that he was a physician, and son-in-law to Dr. Conolly, and had been a pupil of that gentleman. He had had the charge of an extensive lunatic asylum for eleven years, and had had a great deal of experience in the treatment of persons in that condition. He had interviews with Mr. Leach on the 10th, the 13th, and the 19th of May, for the purpose of ascertaining the state of his mind. When he first saw him he told him his object, and apologized for the questions that he said he should be compelled to put to him. He first alluded to his beard, and he said that many men wore their beards, and he saw no reason why he should not do so; but he did not consider the wearing of the beard as at all essential to salvation. On reference to his acting under the influence of the Holy Spirit in all his actions, he said that although he believed that he did so, still he considered that he was fallible like other men, and that he was equally liable to impulse, and, he added, that if the dictates of this Spirit were not rational or right, he certainly should not obey them. The witness said that he conversed with Mr. Leach upon the subject of the millennium, and he considered that his opinions upon that subject were quite correct, and even better than he could have expressed himself. He appeared to think that it might come in fifty or a hundred years, or on the morrow, but he expressed a decided opinion that it had not yet arrived. In reference to the purchase of the pistols, he said that his house had been broken into, and that he bought them for his protection; and upon one occasion he practised with them in his garden, but finding there was a public pathway near the spot, and that it might be dangerous to discharge pistols in such a place, he never did so again. Mr. Leach, in the course of the conversation, said that the marriage was the first thing, and the second thing, and the third thing, and that this was the only reason why his mother had shut him up, and he complained of her cruelty for doing so. Witness observed that it was an extraordinary act for a clergyman to marry one of his domestics, and he replied that ninety-nine men out of a hundred would think the same thing, but they did not know the circumstances. The fact was, he was isolated from the world, he never had the society of any ladies, and he really believed that this young woman would make him a good wife. He then asked Mr. Leach whether he did not desire to be reconciled to his mother, and he said he could not talk of reconciliation when the foot of his adversary was on his neck, and his sword was at his throat, and while a great struggle was going on, but when it was over he would gladly entertain the question of reconciliation. He said that he did not see any harm in an old man and a religious man kissing his servants, and that he never intended anything improper by doing so. He kissed the one he intended to marry upon the lips, and the other on the cheek; and on witness asking him if he intended to do the same after he was married, he replied that his wife would take care he did not do that (a laugh). In the course of the conversation he said that Mr. Leach went through the first proposition of Euclid from memory, working the letters and correct angles. Mr. Leach also talked about his property, and seemed to perfectly understand the value of money. The witness stated that in his opinion the first attack of mania in 1841 arose from excessive nervous excitement, and was not connected with any disease of the brain: and that the second, in 1852, was occasioned by over study, which frequently produced such a result; and he concluded by stating that, in his opinion, Mr. Leach at the present moment was of perfectly sound mind, and quite competent to manage and dispose of his property.

Upon being cross-examined, Dr. Tuke said that it was possible that a conversation might go on for a whole day with a lunatic without his insanity being discovered, unless his particular delusion was touched upon. He should consider it very extraordinary conduct in a clergyman to play at cards with his servants until a late hour of the night, and reading hymns during the deals very extraordinary conduct; but he should not, in the absence of explanation, come to the conclusion that a person who so acted must necessarily be insane. He had never seen a case where a lunatic was altogether able to conceal his delusions; but he did not observe such an attempt on the part of Mr. Leach. On the contrary, he appeared anxious to converse upon every subject that was suggested. The result of what he had seen of him was, that he considered he did not require the least supervision, and that he was as fit to be trusted with the possession of pistols, gunpowder, and bullets, as any other man, and he did not believe there was the least chance of his committing any act of violence either to himself or to others.

Dr. G. Johnson deposed that he was one of the physicians of King's College Hospital, and had had a good deal of experience in cases of insanity and acute mania. He had had three private interviews with Mr. Leach. The first was on the 8th of April, when he conversed with him upon the subjects that were supposed to form the ground for considering that he was insane. The result of the whole of his conversations with Mr. Leach was, that he was of opinion that he was of sound mind and perfectly competent to manage his own affairs, and he did not discover that he was labouring under any delusion. With regard to the vision in the pulpit, Mr. Leach only professed to have had a mental vision of our Saviour; and he said that he never intended it to be understood that he had seen our Saviour corporeally at the time in question. With regard to the millennium, Mr. Leach said that he did not believe that it had arrived, but that it was dawning, and would soon arrive. He also said that he never considered that he was obeying the Divine command in wearing his beard, although to a certain extent he felt that it was a point of conscience. He said that he had bought the pistols to protect his person and his property, and he did not utter a word that induced witness to believe that he was at all likely to commit an act of violence either upon himself or others; but, on the contrary, he seemed to be a remarkably quiet and inoffensive man. The witness then stated that he gave him exactly the same account with reference to the other supposed delusions that he did to Dr. Tuke; and he added that he did not appear to entertain any greater amount of animosity towards his mother than might reasonably be supposed would be entertained by a man who felt that he had been unjustly placed under restraint.

Cross-examined—Witness could not see anything in Mr. Leach that was different to other men. He went to see him on the first occasion with some suspicion in his mind, but if he had met him casually in a drawing-room he should not have thought there was anything extraordinary about him. Mr. Leach might have told him that he had the Divine sanction for wearing his beard, or words to that effect. He also seemed to think that it was more natural to wear the beard than not to do so.

Re-examined—In Southey's "History of Wesley and the Progress of Methodism," there were several instances of persons being converted by visions such as that described by Mr. Leach. All the impulses of Mr. Leach appeared to induce him to do good and never to do evil, and nothing that he had heard in the course of the present inquiry in any way tended to alter his original opinion. He considered Mr. Leach a very well informed, intelligent man. If he had met him in an ordinary drawing-room, he should have considered him an extraordinary man; but if he had met him in a drawing-room where there were none but learned and scientific men, he should have thought him quite at home, and neither his beard nor anything else about him would have excited the least suspicion in his mind respecting his sanity.

Mr. Fuller, a practitioner at St. John's Wood, gave similar evidence to that of Dr. Johnson. He said he had three long conversations with Mr Leach in January, and on the 14th and 18th of May, of the present year, and the result he arrived at was that he was perfectly sane, and he was quite astonished that such a man should be even under the surveillance of a keeper. The most that could be said was that Mr. Leach was an eccentric man; but he did not consider that he was labouring under a single delusion. He added that he believed Mr. Leach to be as harmless as a lamb, and that he was incapable of injuring any one.

Cross-examined—He put no question to Mr. Leach as to his opinion when a man forfeited his life, but he did say that he considered that if he were to shoot a keeper who came to take him, he should be guilty of murder, and should be executed. In the course of the conversation he had with Mr. Leach he said that he played at cards with his servants as a relaxation after severe study. Witness told him that he still thought it was inconsistent with his position, and he replied that no one could come to the correct opinion as to his feelings, and the position in which he had been placed for a great many years without any society, and having no one about him but his servants, and that when his mother left him he was still more lonely. If Mr. Leach had said that he played cards with his servants partly from his knowledge of the Scriptures, he should consider it, without explanation, inconsistent with the idea that he was of sound mind; but with Mr. Leach's peculiar religious opinions, he should consider it necessary to ask him to explain what he meant.

Re-examined—In witness's opinion it was a cruelty to lock up such a man as Mr. Leach. His attention was first called to the case by Mr. Clerk, Mr. Leach's bootmaker, and it was in consequence of his humane interference that he went to see him upon the first occasion. In his opinion Mr. Leach was a man of great piety, sound judgment, and great learning, and it was a pleasure to converse with him.

Dr. Seymour, formerly one of the Commissioners of Lunacy in the metropolis, deposed that he had for eight years acted in that capacity, and he had also had a great deal of experience in other respects in connexion with lunatics. He was first instructed to see Mr. Leach on the part of his mother, through the agency of Dr. Winslow. The report he made was that his irregularities were not, at the time he saw him, of such a character as would induce any jury to find that he was insane. He stated that his views of religion were the same that were entertained by many other persons; and as to his marrying his servant, although it was a very foolish thing, and contrary to their received notions of propriety, still it did not at all establish his insanity; and if such a proceeding were allowed to make out that a man was insane, all he could say was that half of Westminster Hall would be in confinement. (A laugh.) On the second occasion when he saw him, he thought he was much better; his conversation was pleasing; he was a very humane man, and he saw no reason whatever for placing him in confinement. The last time he saw Mr. Leach was in December last, and after he had made his report, the solicitors for Mrs. Leach did not communicate with him, and he was not aware of the former trial having taken place, and he had been suddenly summoned this morning to give evidence. Mr. Leach's religious opinions were certainly peculiar, but not at all more so than were entertained by many persons with whom he was acquainted, and none of them were of a character that was likely to induce him to commit any act of violence. He was quite aware of the nature of the supposed delusions entertained by Mr. Leach, and he touched upon the whole of them, and the opinion he arrived at was, that no twelve men would find him of unsound mind and incapable of managing his affairs.

In cross-examination Dr. Seymour admitted that he had written a letter, March, 1857, in which he stated that Mr. Leach was of unsound mind, and incapable of managing his affairs; but he also said that he did not think any jury

would find he was in that state. When he saw Mr. Leach the second time, in December, according to his opinion he was better. It was his unbiassed and clear opinion, in March, 1857, that Mr. Leach was of unsound mind and incapable of managing his own affairs, and that his family acted wisely and humanely in the course they had taken. Witness considered that Mr. Leach's religious opinions were very much modified when he saw him at Christmas last. In March he appeared to consider that the millennium had arrived or was imminent, but he did not appear to think this was the case in December, and he was much more gentle. At first he appeared to consider that he wore his beard under the authority of the Bible, but the second time he said that he wore his beard because other people wore theirs, and he did not see why he should be looked upon as insane on that account. The witness further stated that a singular feature in Mr. Leach's character was his extreme harmlessness.

Re-examined—He was instructed, in the first instance, that Mr. Leach had struck his mother, but it turned out that there was no foundation whatever for this statement. There were many people moving about the world and managing all their affairs, who, to his knowledge, entertained quite as extraordinary opinions on the subject of religion as Mr. Leach did, and he should be very sorry to say that these persons were insane on that account. Taken as a whole, he thought at first that Mr. Leach had very peculiar opinions, and, coupled with the knowledge of the two previous attacks, he was of opinion that Mr. Leach was of unsound mind in March, 1857, and that he had better remain quietly in the asylum for a short time. After the second visit he considered that there was no danger in his being at large, and that he was quite competent to manage his affairs; and if he were confined in an asylum over which witness had control, he should have no hesitation in setting him at liberty.

By the Commissioner—He had a very long professional interview with Mr. Leach in March, and he then came to the conclusion that he was insane, but he should have felt a difficulty in signing a certificate for his removal to a lunatic asylum, and he should rather have had him placed under the charge of his friends or in the care of an attendant.

Mr. Cotton, a tailor, who had occasionally worked for Mr. Leach for sixteen years, proved that he ordered what he required and paid him regular, and appeared quite competent to manage his affairs. He said that he first heard Mr. Leach was taken to a lunatic asylum between Christmas and March, 1857. He was a very kind and benevolent man, and he considered that he would not injure any one.

Mr. Carey, another tailor, proved that he was in the habit of communicating with Mr. Leach up to the time when he was taken to the lunatic asylum, and he and every one else in the neighbourhood were quite astonished that such a course should have been taken respecting him. He had some clothes to make for him at the time, and he went to Dr. Winslow's asylum about three weeks after he had been there, and saw him upon the subject of these clothes. He was told that he would not be allowed to see Mr. Leach again unless he brought a letter from his mother, and as he knew it was no use asking for that, he never saw him again.

Mr. Smith, a builder at Hammersmith, gave similar evidence, and he also proved that there were a great many robberies at that place, and that a good many gentlemen living there purchased fire-arms. Mr. Leach was very correct in all his dealings, and he considered that he was perfectly sane.

Mr. Clerk, a bootmaker, deposed to the same effect, and also stated that he was so satisfied that Mr. Leach was incapable of committing any act of violence, that he should have no objection to sleep in the same room with him if he had loaded pistols in his possession.

Mr. J. U. Romer, a gentleman who lived in an adjoining villa, proved that

his house was attempted to be robbed, and that Mr. Leach's was also broken into. He saw Mr. Leach about every day up to the time of his being taken away, and he always considered him a very sensible, sane man, and quite competent to undertake the management of his affairs. His mother lived with him a great portion of the time, and she never made any complaint of the condition of his mind, or of any necessity that existed for his being placed under control.

Dr. Conolly, the consulting physician at Hanwell for twenty years, was then examined, and he stated that in his opinion Mr. Leach was quite competent to manage his affairs. He said that he had very long conversations with him, and he allowed him to go on talking for a long time, and he never exhibited the least incoherence. He did not appear to desire to conceal anything, but candidly admitted that upon two occasions he had been properly placed under restraint.

Cross-examined—He had advised at one time that Mr. Leach should be under surveillance, or that he should travel accompanied by a medical gentleman; but his opinion now was that any surveillance would be irksome to him, and that it was quite unnecessary.

Re-examined—He distinctly stated on the former occasions, that in his opinion the best thing that could be done was to release Mr. Leach from restraint.

By the jury—If there had been any trace of insanity in the mind of Mr. Leach, the severe test that had been applied to him of confining him in a lunatic asylum for so long a period was most calculated to bring it out.

The following letter, addressed by Mr. Leach to his brother-in-law, Mr. Sidden, while in confinement at Dr. Winslow's, was then put in and read:—

"Why, Sidden, what a man you are to act as you have done towards me! I am really annoyed at you, and hardly know how to write from impatience and disgust. To cause me to be put under restraint, taking such a cowardly advantage of my isolated position—a marvellous thing, indeed, that you should have such power in this free country. But for my projected marriage, such a proceeding could never have entered your head. Why, it was only on the Saturday previously that I had the long conversation with Laura, when I waited for you till half-past five, that we might talk the matter over. What was there in my manner or language that could indicate the shadow of a taint of insanity? I can confidently assert—nothing; and so would Laura. But it seems she thinks it less disgrace to live with a woman without marriage, or to visit houses where men are in the habit of gratifying their passions, than to contract a lawful marriage with a person of different station from myself. I hold an opposite opinion, and for that I am deprived of my liberty—a most cruel and wicked step on your part, for which you will one day have to answer to your shame. There is a Power above who will sooner or later right the oppressed, and in that Righteous Power I put my implicit trust. This house is not intended to hold persons like myself, who happen to give offence to their mother and sisters, but for those unfortunate ones who, under delusion, think their right hand their left, or fancy themselves emperors or kings, &c. Nobody ever thought of imprisoning Charles Mathews when he married Madame Vestris, or Alfred Montague when he united himself to one of the same sort of women. And though there is a religious motive associated with mine, if that would indicate insanity, you might as well imprison the whole body of Quakers, of Methodists, of Swedenborgians, of Mormonites, and I know not how many more, who act according to their consciences, and believe that they act more or less under Divine influence in their every-day proceedings. Think of the Quakers, who believe in what they call the inward spirit, and never speak at their public meetings unless they are, or think they are, moved by the Holy Spirit. Women are allowed thus to speak as well as men. How

ridiculed they are, and have been, and persecuted, everybody knows; but we have lived to see the day when they and all religious sects are freely tolerated. It is grievous to think that for my temper on the Friday previous, and my divulging my intended marriage—which, by the way, if I had chosen I could have contracted secretly—neither you nor any one else would have cared more than you have ever cared for my religious opinions or conduct; that is to say, not a twopenny piece. I do hope and pray that both Winslow and Bartlett will be very soon convinced of my perfect sanity, and that, as Englishmen and Christians, they will hasten to wash their hands of this matter. If not, and it were possible you could succeed in keeping me here, why, then, I might as well be in Rome, and imprisoned in the Inquisition for denying the supremacy of the Pope or transubstantiation, save and except that there is no rack or torture, but, on the contrary, much comfort, and every one trying to do the best they can for us. Sidden, cease, I beseech you, from this unmanly conduct, and show yourself a man, and somewhat worthy to live in such a country as this, where Sabbaths, and clergy, and Bibles compel almost every man to know right from wrong; where responsibility is therefore greater, and retribution in cases of injury must be most terrible.”

Mr. Garth then proceeded to sum up the case of the alleged lunatic, and he urged that it had been most clearly established that there was not the slightest pretence for saying that he was of unsound mind, and that he was entitled at once to be set at liberty.

Mr. Bovill then made a most able reply upon the whole case. He particularly remarked upon the servants who were with Mr. Leach from the period of his mother leaving the house until he was removed to Dr. Winslow's asylum not having been called as witnesses to show what his conduct really was during that period; and he said that the only inference that could be drawn from their absence was, that if they had been called they would have been compelled to admit that he was in a state of insanity. The learned counsel then commented upon the evidence that had been adduced on both sides, and concluded by expressing his opinion that there could be no reasonable doubt of the insanity of this unfortunate gentleman, and that the jury would have no alternative but to return a verdict to that effect.

The Commissioner addressed a very few observations to the jury, and at half-past seven o'clock the room was cleared, and they proceeded to deliberate upon their verdict.

In a very few minutes the court was re-opened, when the foreman announced that, by a majority of nineteen to four, they were of opinion that Mr. Leach was of sound mind, and perfectly competent to manage his affairs.

There was a burst of applause when the verdict was pronounced.

INDEX TO VOL. XI.

- ARLIDGE, Dr., on the asylums of France, 59
 Asylums of France, by Dr. Arlidge, 59
 — in Norway, by Dr. L. Lindsay, 246
 — private, popular outcry against, xxxiii.
 Autobiography of a drunkard, 461
 Auzony, M., on disordered sentiments and affections, 661
- BODY v. Mind, 1
 — and Mind, by Dr. Jamieson, 335
 Brontë, Charlotte, 295
- CIVILIZATION, on, 176
 Cysticerci in the brain: singular case of insanity, 645
 Czermack, Dr., on a singular case of insanity, 645
- DEAF and Dumb, responsibility and legal relations of, by Dr. Jendritza, 643
 Dipsomania, on, by Dr. D. Skae, 349
 Drunken insanity, on, 349
 Drunkard, autobiography of a, 461
 Dunn, Mr., on physiological psychology, 317
 Dreams, on a particular class of, induced by food, 567
- EARLE, Dr., on the paralysis of the insane, 444
- FERRUS and Garnier, MM., on somnambulism and extraordinary neuroses, 652
 Follet, Dr., on lesions of the relative functions, 647
 Foreign Psychological Literature, 640
- GARNIER and Ferrus, MM., on somnambulism and extraordinary neuroses, 652
 Gray, Dr., on homicide in insanity, 142
- HOMICIDE in insanity, by Dr. Gray, 142
- Hood, Dr., on the pathology of insanity, 97
 Hoppus, Dr., on the psychology of Kant, 494
 Howe, Dr., on the causes of idiocy, 365
- IDIOCY, causes of, by Dr. Howe, 365
 Indian rebellion, moral and psychological aspects of, 39
 Insane, condition of, 88
 — criminal responsibility of, 166
 — paralysis of, by Dr. Earle, 444
 Insanity, pathology of, by Dr. Hood, 97
 — intemperance as a form of, 102
 — homicide in, by Dr. Gray, 142
 — treatment of, in Julius Hospital, Würzburg, 124
 — Dr. von Marcus on, 124
 — Dr. Ernst Schmidt on, 124
 — legal doctrine of responsibility in cases of, connected with alleged criminal acts, by Dr. Forbes Winslow, 214
 — in Norway, by Dr. L. Lindsay, 246
 — drunken, or dipsomania, by Dr. D. Skae, 349
 — tendency of misdirected education to produce, by Dr. Jarvis, 424
 — a singular case of, 490
 — physical symptoms of, by M. Sause, 641
 — singular case of, by Dr. Czermack, 645
 Intemperance as a form of mental disorder, 102
- JAMIESON, Dr., on mind and body, 335
 Jarvis, Dr., on the tendency of misdirected education and the unbalanced mind to produce insanity, 424
 Jendritza, Dr., on the responsibility and legal relations of the deaf and dumb, 643
 Juridical Society and the criminal responsibility of the insane, 166

KANT, psychology of, by Professor Hoppus, 494

LANGUAGE of orators, poets, &c., psychological basis of, 567

Leach, Rev. W. J. J., case of, 668

Lindsay, Dr. W. Lauder, on insanity and lunatic asylums in Norway, 246

London, on the moral pathology of, 539

Lunacy legislation, 523

— present state of, in England and Wales, 626

— Commissioners in, report of, 626

— Commission in, Case of Mr. Leach, 668

— Mr. Ruck,

xxx.

— Mrs. Turner,

xxx.

MANIA with homicidal tendency, case of, by M. Morel, 660

Marcus, Dr. von, on insanity, 124

Mayo, Mr., on the psychological basis of the language of orators, poets, &c., 567

Mental disorder, intemperance considered as a form of, 102

Mind v. Body, 1

Mind and Body, by Dr. Jamieson, 335

Mind, unbalanced, tendency of, to produce insanity, by Dr. Jarvis, 424

Morel, M., on a case of mania with homicidal tendency, 663

Mormonism, xxiii.

NERVOUS System, Dr. E. Brown-Séquard on, i.

Norway, insanity and asylums in, by Dr. L. Lindsay, 246

OXFORD examination of persons not members of the University, xxv.

PHANTASMATA, 136

Physiological psychology, by R. Dunn, F.R.C.S., 317

Psychological literature, foreign, 640

— Quarterly retrospect, xvii.

et seq.

RELATIVE functions, on the obliteration and aberration of, by Dr. Follet, 647

Renaudin, E. M., on the pathogenic influence of loss of sleep, 665

REVIEWS:—

Dr. Sieveking on Epilepsy, 626

Drs. Bucknill and Tuke's Manual of Psychological Medicine, 635

Ruck, Mr., case of, xxx.

SAUZE, M., on the physical symptoms of insanity, 641

Schmidt, Dr. Ernst, on insanity, 124

Sentiments and affections, on disordered, by M. Auzony, 661

Séguard, Dr. E. Brown-, on the nervous system, i.

Skae, Dr. David, on dipsomania, 349

Sleep, on the pathogenic influence of loss of, by M. Renaudin, 665

Somnambulism and extraordinary neuroses, on, 652

Suicide, on, 396

Suicides, xxxv.

THELLUSON, Peter, xxvii.

Tuke, the late Samuel, Esq., of York, 173

Turner, Mrs., case of, xxx.

VIRGIN, apparition of, at Lourdes, xxi

WINSLOW, Dr. Forbes, on the legal doctrine of responsibility in cases of insanity, 214

— on lunacy legislation, 543

Witchcraft, modern belief in, xviii.

Wills, remarkable, xxvii.—xxix.

YOUNG, Brigham, xxiii.

1

2

3

4

5

6

7

8





4

